MAINE FARMER

AND JOURNAL OF THE USEFUL ARTS.

BY MARCIAN SEAVEY.] "Our Home, Our Country, and Our Brother Man." [E. HOLMES, Editor.

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THE FARMER.

HALLOWELL, TUESDAY MORNING, MAY 22, 1838.

WASHING SHEEP.

Although from circumstances not connected with Agricultural operations, wool will not be in great demand this spring it is nevertheless a duty incumbent upon all who may have any to sell to prepare it in the best manner.

We have every year taken the liberty of jogging the elbows of our wool-growers upon the subject of cleansing their wool, because much complaint has been made by the manufacturer that wool from this State is not properly cleansed. Most if not all of the fleece wool which we sell in this State is washed while on the sheep. The washing is generally done by some one who is paid by the job and of course the sooner he goes through the flock the more he will make for the time he works.

Another reason is this. The mode generally adopted is to plunge into the stream, river or pond, sheep in hand, and there stand hour after hour, sometimes up to the arm pits in the cold water. No wonder that the business is hurried over and the wool slightly cleansed.

The last cause may be done away by adopting the method which we have heretofore published, viz. to make a large vat or box and set it at the fall of a brook, or in any position that the water can be conveyed into it. The operator standing on the outside, comparatively dry and unexposed to the cold water. In this way it may be done thoroughly, and the water as fast as it becomes loaded with dirt from the fleece be let off and clean admitted.

Another reason why much of our wool is not so clean as it should be, is suffering the sheep to run into pastures that are not so clear of decaying stumps or sand banks as they should be. Sheep that may be washed perfectly clean, if turned into such places will in a day or two become soiled, and their wool need another cleansing before shearing.

One word in regard to the decrease of the flocks. We are aware that scarcity of hay which has troubled our farmers for two seasons past, has also compelled many of our farmers to reduce their flocks. But many others who have not suffered by the diminution of their grass crops, have also killed, or sold off their sheep to be killed, because of the depression in the wool market. We do not think this is the best policy to pursue. The time will come ere long, when wool will be again in good demand, for mankind must be clad, and the cloth to do it must be manufactured, and the wool must be bought to do it with.

Population is daily increasing, and every additional individual will require an additional fleece or two to keep him warm. We therefore think it advisable to spare the sheep, and consign not quite so many of them to the slaughter.

Soaking or Preparing Seed Corn.

Many people think it advisable to soak their seeds previously to planting, in order to hasten their germination, and bring them up sooner. In addition to this, some use one kind of solution, and some another, in order to give them an unpleasant taste in order to prevent worms from eating them, and thereby preventing their coming up.

We last year published a communication from a venerable Farmer, recommending soaking corn in tar, and rolling in plaster. Several who tried this lost their crops on this account or some other, for it never came up. Others, however, succeeded very well with it.

We will venture to recommend to those who wish to soak their seed corn for either of the above named purposes,—viz., to hasten germination or keep off worms,—to soak it in a solution of Salt Petre. We have often tried this with favorable results.

A writer in the Philadelphia Farmers' Cabinet, recently recommends it, and alleges that he is confident that its good effects are to be seen throughout the season, and that an increase of corn is the inevitable result. Whether this will or will not be the case, we cannot say from any observation that we have made; but as it is a preparation which is cheap and easily obtained, it may be well to try it with this in view also.

A solution of common copperas is also recommended by many for the purpose of preventing worms from destroying corn soaked in it, and also tobacco steeped in water. The first of these we have tried with good success; of the merits of the latter we cannot speak. It is possible that some of the worms *in* the soil may be as fond of the "Indian weed" as many upon it, and in that case may take it as a welcome present, and quite a favor in combining their bread and their tobacco together.

ORIGINAL COMMUNICATIONS.

CULTURE OF WHEAT.

(CONTINUED.)

MR. HOLMES:—As I always wish to be understood, I will now state, as explicitly as I can, my views on some matters of fact, as well as opinions connected with this subject.

In the Maine Farmer, Vol. 5, page 269, I stated that it would be nothing but vanity or obstinacy in any one to speak with much confidence of any remedy for preventing their (the Grain Worms,) attacks. Lime and ashes have been tried in this neighborhood without success, &c. In this statement I had distinctly in view the mode of application then the prominent subject of discussion in the Agricultural journals; viz: the application of lime and ashes to the tops of the wheat plants. It had no application to the use of either lime or ashes applied to the soil.

A writer in the Maine Farmer, Vol. 5, page 386, gravely introduces the following query,—"Who believes if the earth was well covered with lime or ashes, at the time they come out of it, that they would be very comfortable thus saturated with alkalies?" To this I would say, with respect to ashes, if applied before the alkali was absorbed by the soil, or the lime in a caustic state, and before it becomes effete, in either case it might destroy them. This must be a "self-evident proposition;" yet still it affords not a single gleam of light to guide us in practice. We must know when the period alluded to takes place, and the quantity necessary to be employed to effect that purpose. I can only say, for myself, that I have but little more faith in applying these substances to the soil as a means of destroying them, than to the tops. By destroying them, I mean actually killing them; not merely making them "uncomfortable." But I have stated, and I reaffirm it now, that I believe lime, and perhaps ashes, may be of immense benefit, in giving the wheat plants a healthy growth, and by so doing, hastening the maturity of the plants. All the evidence I have obtained from my own observation, or that of others, leads to this conclusion.

Again; with regard to Mr. Ruffin's opinion, that lime benefits wheat by the warmth it imparts to the soil, I would observe, it is probable he imbibed this idea from the fact, that it enabled wheat to withstand the severity of winter better. This seems very plausible at first sight. But let it be remembered that the severity of the cold is not always, if ever, the cause of winter-killing,—if such we may term it. In some of the most striking instances that I have seen of this process, it was evidently the effect of unnatural warmth for the season. The snows came on before the ground was frozen—accumulated to a great depth and as soon as the earth was bare, the grain was found to be dead, and had been, apparently, for some time. I pretend not to give the cause; but one thing is evident, it was not the extremity of the cold.

Again, wheat does best in cold summers. This rule is of general application. From these facts, it must be evident, I think, that the benefit wheat derives from lime must be assigned to some other cause than increase of warmth in the soil, especially in Virginia.

We are now prepared to refer again to the enquiry what the probable effect of lime will be on the Grain Worm. We have seen that it hastens the maturity of the wheat plants. Now if, instead of hastening the hatching of fly which produces the worm that does the mischief, it should rather retard it, the benefit will be immense.

It will, I believe, now be readily perceived, that I place almost entirely the prospect of success, in combatting this enemy, on the ground of avoiding the season of its attacks. I do not, however, despair of finding some remedy which may be effectual in destroying it, even when the grain and fly come to the proper state of maturity together. But I have no hope that it will ever be done without a great expense of labor, if nothing more.

Another remedy which I propose is almost certain to produce the best crops under all circumstances, except in the attacks of the Hessian fly and in such soils as cannot be sown early. It is probable, however, that there are few soils too wet to be sown as early as necessary.

The view now taken of this subject, I think also adds some support to the theory I have advanced heretofore on the causes of rust, &c. in grain. If there are insects which injure the stalks or leaves of grain plants, and this injury produces rust, their state of maturity; and the remedy which will be effectual in one case will be in the other.

J. H. J.

Peru, April, 1838.

For the Maine Farmer.

RAIL PATHS.

Rail Paths are light rail roads. They are designed to be extended where Rail Roads would be too costly, and would not be needed. Rail roads are made of great solidity, and consequently at great expence. They are made to sustain on every eight feet of length the weight of about 20,000 pounds, in addition to the strain of this weight in drawing a train of cars: for some locomotives weigh more than 16,000 pounds. Rail paths may be made, therefore, much lighter and cheaper than rail roads. I will suppose them made light and cheap enough for men to propel themselves, or draw loads upon them. The structure, in this case, would require very little labor or material. Thus a ravine might be easily crossed by a cheap bridge; or the path might be made on posts across such hollows, and over low grounds, where a rail road would require a heavy embankment of earth and stone. As the Path might be extended at little expense on account of its cheapness, it might be carried round a hill, instead of being made through it, by a costly excavation. The Rail Road from Charleston to Hamburg, opposite Augusta, Ga., 136 miles in length was built partly on posts, and was used before the embankment was made, by filling up with earth under the rails.

Some calculations may shew that human strength may be usefully applied to Rail Paths to some extent. Pambour found that, on a level rail road, it required only the traction of eight pounds to draw a load of 2240 pounds, where the opposition of the air was broken by a carriage going before. If a carriage moves separately at the rate of 12 miles per hour, the resistance is 11 65-100 pounds per 2240 pounds. At this rate the traction of 2000 lb. would be 10 4-10 lb. At a lower speed than 12 miles per hour the resistance would be much less; and we may estimate therefore the traction of 2000 lb. at 10 lb., or 200 at 1 lb. That is, as easily as a man can draw up a weight of one pound perpendicularly, he can draw 200 lb. on a level rail road.

Of various estimates of the average strength of men, I take that of Farey, a recent writer on the steam engine. He says that the power of man may be assumed equal to the raising of 3750 lb. one foot high in a minute, and that a stout laborer will continue to work at this rate eight hours a day. This would be 62 1-2 lb. raised one foot high each second; but to raise 62 1-2 lb. one foot high would be equal to moving 200 times 62 1-2 lb. one foot on a level rail road; that is, a man could move 12500 lb. one foot in a second, or, which is equal, 1250 lb. 10 feet in a second. In a minute, therefore, he could move 1250 lb. 600 feet: and in an hour he could move it 36000 feet or 6 3-4 miles. He could exert this power eight hours a day, and each day therefore he could exert the force equivalent to propelling a load of 1250 lb. fifty-four miles in a day.

Of course a man could not travel 54 miles a day, and draw such a load; but he must move himself in his light car by using his strength in giving motion to its wheels by a crank, or some other contrivance. An ingenious, but not a philosophic gentleman, of this State, contrived a carriage for a man to move himself on common roads. A man acquainted with facts relating to such matters might have forseen that it would not succeed. The power that would move 600 lb. on a level rail road, would move only one-twelfth of this weight, or 50 lb., on a common level road; and then there are ascents on common roads, which are avoided on rail roads. As easily as a man could wheel 50 lb. on a common level road, he could move 600 lb. on a level rail road; or, as easily as he could wheel 100 1-4 lb. on a common level road, he could propel 1250 lb. on a level rail road.

But, could Rail Paths be made without too great inclinations, or too great expense? Most certainly. Look over the country and observe how vallies are cut out by water courses, even through hilly and mountainous regions, as though they were excavations expressly designed for the passage of men for business, and for all the purposes of social life. Thus the country may be traversed extensively without encountering high ascents. From the tide on the Kennebec at Hallowell 121 miles to Moose River Bridge, the average ascent is only 10 1-4 feet per mile, on one foot in 515 feet. Thus the force, that would draw up one pound, would, in addition to the traction on a level rail road, draw up 515 lb. on this ascent. On the other hand the descent, if it were every where equal, would be just about enough to make a car roll down of itself.

The ascent on the Penobscot is about the same as on the Kennebec. Streams of water keep very nearly an average level. The Ganges, in 1800 miles, falls but 7 1-3 inches in a mile. The Alleghany, from Olean to Pittsburg, 250 miles, falls only 2 1-2 feet per mile. From Barnet, Vt., to Hartford, Conn. 220 miles, the descent on the Connecticut is but 2 1-2 feet per mile.

If, however, we should leave the vallies and streams, and take the course of Rail Roads, the departures from a level would still be small. From Portland to Quebec the whole distance is 277 miles, and 249 of this are attended by gradations not exceeding 35 feet per mile. The average rise and fall per mile would be far less than this. The route of the Rail Road from Worcester to Hartford is through a hilly country; and yet the average rise per mile is but six feet, and the average fall but 12 1-2 feet. The Rail Paths here contemplated would be only partially extended through the country, namely, along the vallies, until they reach large Rail Roads, or places of business, and the inclination would be less than stated above, and would not generally exceed 10 feet per mile in one direction.

The plan of Rail Paths particularly concerns our agricultural population; for the remoteness of their dwellings from mills, markets, schools and meetings is a serious inconvenience. The cost of transportation is a dead loss to the public, and it is immense. It can be easily estimated how much more valuable produce would be, if one horse could draw, at nearly all seasons of the year, twelve times as much as he can now draw at some periods only, when the roads are in a good state, or, if a man by his own strength could draw twelve bushels of grain as easily as he could now wheel one on level ground.

Another view however is to be taken of this matter. I consider that greater facilities for getting to schools, to religious meetings, and to all the means of intellectual and moral improvement are of far higher importance than increased facilities for business. As to their physical condition men can live well enough in the present state of the arts and sciences, and of means of communication, if they will only be industrious and moral. But if they will not maintain correct habits, greater natural, and artificial advantages will only make them more miserable by presenting new means of indulgence and new temptations to vice. I would then supply greater facilities for access to schools and religious meetings for the improvement of the mind and heart: and Rail Paths may furnish these.

I suppose then that to walk two miles is equivalent to half an hour's work; but in half an hour a laboring man, according to the calculations made in this article, might move a load of 1250 lb. more than three miles on a level rail road. If a youth has half the strength of a laboring man, he could as easily move a load of 675 lb. three miles as walk two miles; or he could as easily move a load of 337 1-2 lb., on a level rail road, three miles, as walk one.

In ascending elevations, greater strength must be expended; and it is not pretended that we can transport ourselves up our wholesome hills with ease: for iron rails will not suspend the laws of gravitation. But the custom once in vogue of perching churches and academies on the highest swells in town is growing into disuse; and a water level is more generally sought for roads; and to a great and useful extent therefore Rail Paths may be employed for social intercourse, because this intercourse is conducted already along vallies to a great extent, and may be extended through them much more.

PUBLICOLA.

JUDGE BUEL'S REPORT.

(Concluded.)

It requires no science, and very little art, to wear out and exhaust the most fertile soil. The process is simple; take from it all you can, by close cropping, for a few successive years, and return to it nothing in the form of manure, and the work is done, or far advanced. In this business we have shown ourselves to be no mean adepts. But it does require science, and art, and perseverance, and capital, to restore fertility to a soil which has become exhausted. This we have not yet sufficiently learned; but it should be our next lesson; and the sooner we begin the sooner shall we profit by it.

Agricultural improvement is slowly developed, at least to superficial observers. It requires years to renovate to fertility of an exhausted soil—to improve the stock of a farm; or to realize the benefits which result from draining, from alternating crops, and from root culture. We are much in the habit of calculating upon *immediate* gains, without looking to remote and ultimate benefits. We saw not the change, when the law of 1819 was in force, because its benefits were but partially developed. But we now hear the remark from hundreds, that the appropriation of 1819, was one of the most beneficial to the state that has ever been made by the legislature. The popular vote of the state would never have sanctioned the construction of the Erie and Champlain canals; and yet the wisdom of the measure is now sanctioned by an enlightened world. Although the construction of these canals, may have operated prejudically to some individuals and districts, yet the benefits which have resulted to the whole state have amply compensated for any personal inconvenience or injury they may have caused. So with the law to encourage agriculture; many did not foresee its benefits, who now acknowledge that they are palpable and important. We must judge of public measures by their fruit; and before we are competent to do this, the seed must germinate, the plant grow and blossom, and the fruit mature. This is particularly the case in all measures to improve agriculture. It is the province of wisdom to look ahead—to sow the useful seed, and to wait the coming harvest for the recompense. We must sow in the spring—and cultivate well in the summer, if we would gather an abundant harvest, in autumn.

We may almost lay it down as a mixim, that THE MENTAL AND MORAL CONDITION OF AN AGRICULTURAL DISTRICT, IS IN THE RATIO OF ITS IMPROVEMENT IN HUSBANDRY. To borrow the spirit of a political saying—*as goes agriculture, so goes the State.* There is certainly much truth in the remark, that where the farming is slovenly and bad, ignorance, indolence, and vice, must generally abound; and that where agricultural improvement is most advanced, the population are most industrious, most intelligent and most moral. Knowledge begets a love of knowledge; and when a man has acquired enough of it to convince him of his farming capital, and he is anxious to increase his stock of it, as the readiest means of improving his condition in life, independent of the mental pleasures which it imparts.—But not having acquired the requisite degree to enable him to appreciate its value, or to show him the defects of his system of management, he

plods on, with listless indefference, in the ways of his fathers; and as great success now-a-days, seldom rewards such labors, he too often becomes spiritless ond dissatified, and relaxes into indolence, of which vice is too frequently the concomitant.

Under the existing state of things, how does it become us to act? What are we to do? Shall we fold our arms, leave agriculture to decline further, or to shift for itself, and depend upon more propitious seasons, and other Providential interpositions, to supply our wants? Shall we depend upon the cotton, rice, and tobacco of the south, which constitute our almost entire exports, to pay for the commodities which we consume in the north? Or shall we, animated by the enterprise and love of independence which were wont to animate our fathers—take in hand resolutely to provide abundantly for ourselves, encouraging and enlightening agriculture, elevating its character, and stimulating it to new efforts, by suitable honors, and rewards?

As regards the means of improvement, much has been done, and much is doing, by the agricultural periodicals of the day. The first of these was established at Baltimore, by John S. Skinner, in 1819; and we can now enumerate nearly twenty, that are diffusing light, awakening enterprise, and inciting to industry, in every section of our country—Probably one hundred thousand farmers, are deriving instructions, and improving their practice, by the perusal of these journals; and it is not extravagant to say, that the benefits they are dispensing to the nation are equivalent to millions of dollars every year. But what is one hundred thousand compared to the gross agricultural population of the union? and how much greater would be their benefits if these Journals had access to every farm house, or even to every school-house, in the State? Besides giving much that is useful in the science, or the first principles of husbandry, they are continually advertising their readers of every improvement which is being made in the practical operations of the farm—of new seeds, and plants, and the mode of cultivating them, and of every improvement in labor-saving machines. In twelve numbers of the Cultivator may be noticed more than a hundred and twenty communications, mostly from practical farmers, residing in the different states, detailing their practice in different departments of husbandry, thus making their improvements known, in a short time, to its twenty thousand patrons.

By thus concentrating, as it were in a focus, the practical knowledge of the country, and then scattering it, like the solar rays, into every coner of the land, to fructify the earth, and by thus rendering it subservient to the benefit of all, some individuals have been enabled to obtain a clear profit of fifty, one hundred, and even one hundred and fifty dollars, on an acre of corn, or an acre of Swedish turnips, who had never before obtained a profit of thirty dollars an acre from either. And the benefits of these splendid results are not confined to the individuals who effected them: they are heralded in the agricaltural journals; become known all over the country, and every new and successful effort at improvement, soon has its fifty, hundred, and its thousand imitators.

Suppose, for instance, what we hope will yet prove true, that an individual should discover an effectual preventive of the ravages of the Hessian fly, or grain worm—instead of benefiting him and a few neighbors, or becoming gradually known, as in olden times, the knowledge of it would now be spread in a few days, by the agricultural periodicals, into every corner of the land, and the advantages of the discoverery would thus amount to millions in a single year. So with every other improvement in husbandry. It is not the province, nor is it the study of news journals and literary editors to deal extensively in agricultural concerns. They seldom publish even the incidental notices which are designed to subserve the interests of husbandry, without a special request, and a fee in the bargain, as though *they* had no personal interest in the progress of agricultural improvement. We would infer from these premises, that every man will promote his interest, and benefit the public, by patronising and endeavoring to extend the circulation of our agricultural papers. They tend to no possible evil, while they are certainly calculated to do much public good.

Another means of facilitating agricultural improvement, is to introduce class books, into our common schools, for the senior boys, which shall teach those elementary principles of science which are indispensable to the successful practice of agriculture. A boy may be almost as easily taught to analyze soils, and to comprehend to leading principles of animal and vegetable physiology, as he can to commit to memory pages of matter, the knowledge of which seldom serves him any useful purpose in manhood. We must begin in youth, if we would bring about any material improvement in the habits of society. The good seed that is sown in the spring time of life is never lost,—it will ultimately sprout, and grow, and give its increase, as sure as the grain which we deposite in a fertile soil. The tree *will* grow as the twig is bent. Youth is the season to get instruction in the principles of the business which is to constitute the employment of life; and the more the knowledge which boys acquire in these principles, before they start in life for themselves, the more likely they are to prosper and become useful to society. The time that the senior boys in school devote to the business of the farm, will give to studies which are connected with their present and future business, an interest and an influence which will be as abiding as life.

But we would go farther in the business of agricultural instruction; we would establish schools to teach simultaneously, both the theory and practice of agriculture. We would carry something of the theory into the primary schools, and much of the practice into the school of science. Veterinary schools, to instruct in the anatomy and management of domestic animals, have long been established in Europe; their usefulness has been highly extolled, and their numbers are increasing. Switzerland, Prussia and France have also their schools, in which the science and practice of agriculture are taught to hundreds of young men, who are thereby enabled to manage their estates, with greater benefit to themselves and the public or to obtain honorable and lucrative situations as managers for others. We give bounties on our fisheries, to make them a nursery of seamen; but we give none upon agriculture, which is the best nursery of freemen. We spend millions annually to protect our commerce; but we give nothing to improve agriculture, which is the basis and support of that commerce. We protect our manufactures by a heavy tariff; yet agriculture, which furnishes the raw materials, and boys the fabrics, which the manufacturer consumes and vends, is left to protect itself. We have expended nearly, three millions in this state, to aid in educating almost exclusively professional and other gentlemen; and yet we have given nothing exclusively to educate our agriculturists, who constitute the great mass of our population. And yet there is probably no employment in life capable of being more benefited by a professional education—none in which a professional education would conduce more to the public prosperity—than that of managing our farms. A proper knowledge of soils, manure, vegetables and animals—of the agency of caloric, of moisture, of the atmosphere, and of light, in the economy of vegetable and animal growth—are all of great use to the farmer, and yet in what existing school can he acquire this knowledge, during the period of life in which he ought to obtain his practical knowledge?

All impressions of general reform, to be successful, must be first made upon the ductile minds of the younger population. The old are apt to be too obstinately wedded to their juvenile habits and prejudices. Men are apt to grow up in the creeds in which they are instructed,—be they Christian, Mahomeden or Pagan,—be they of good or bad husbandry. And if our youth are early instructed in the first elements of agriculture, and taught to consider it, what it truly is, an employment eminently calculated, above all others, to promote individual and national prosperity and happiness, they will aspire to honor and distinction in its labors—and will not so generally press to the cities—to the bar and the counter—for the means of gratifying a laudable ambition. And society will reap an abundant reward from the change. We will illustrate this by an historical fact. Ernest, former Duke of Saxe Gotha, had his people instructed by compendiums of every kind of useful knowledge, incluing music and drawing, that were put into the hands of youth in all country schools; and which in a few years entirely changed the face of his principality: and "it is amazing," adds our author, who wrote some years afterwards, "to observe the different eradiations of genius, in this and the adjacent circles. The effect was alike beneficial in the improvement of the soil and mind. And the example of Saxe Gotha, probably led to the excellent system of school instruction in agriculture, which has since been introduced by Prussia, and most of the German States.

It has been stated, as an objection to the establishment of agricultural schools, that they would be only accessible to the rich. The objection, even if well founded, would not go to lesson their value of the State: For if we would convert a few hundred drones, as the sons of rich men may generally be termed, into working bees, the public, as well as the young men themselves, would certainly be gainers by the transformation. The complaint is that we have many consumers, and too few producers. This would tend to restore an equilibrium: For the examples of the rich, be they good or bad, have an imposing influence on the middling and lower classes; and thus to improve the habits and morals of the rich, would be the surest way to improve the condition of society. Hence, therefore, if agricultural schools can be instrumental in annually converting a few hundred of the idle and dissipated sons of wealth—or rather in preserving them from these habits—into wholesome, industrious farmers, agricultural pursuits will be more respectable, and more followed; and we venture to predict, that then we shall not long continue to do, what we have done—import potatoes from Ireland and Germany, hay and oats from Scotland, eggs from France, and bread stuffs from all the countries of Europe, including the dominions of the autocrat of Russia, and of the Grand Turk.

But it is not exactly true, that the rich alone would find access into agricultural schools, were such established. The rich rely upon their paternal wealth, and have not often the ambition to become useful, at least by the habits of manual labor, which would be rigidly required in such schools. The schools would be filled with the youth from all classes of society, who aspired to fortune and independence, by a manly exercise of their mental and physical powers—the young men of this description, even from the poorer classes, do obtain admission into literary institutions, and they would into agricultural ones with greater facility—because the terms of admission here would be more reasonable—and with equal prospect of distinction and usefulness in after life. But whether these schools should be filled from the rich or poorer classes, or, as we have supposed, from all classes indiscriminately, a certain and great public good would result from their establishment: the pupils would go to swell the producing classes of society, with habits of application and usefulness, minds imbued with scientific knowledge, bodies hale and robust, and hands practiced in all the manuel operations of the farm.

It verily seems to us certain, that if the importance of the subjects which we have discussed, could be justly appreciated by the community at large, every class of our citizens would concur in the propriety of a united effort to improve the condition of our husbandry, and of speedily adopting the measures we have suggested, or others equally aviling, to produce the desired result.

THE GRAIN GROWING STATES.—Much is said of the magnitude and importance of the produce of the South, which is estimated at an hundred millions of dollars. Let us look a moment at the agricultural products—to say nothing of the manufactures—of the northern, western and middle States. A Buffalo paper says:—

"In our article a few days since, upon the subject of the flour, we stated the produce of last year, to be, in round numbers, 29,000,000 of barrels.—Assuming 24,000,000 to be the average annual yield, and supposing that seven-eights of this quantity are raised in the states not considered as planting States, in the whole or in part, and we have 21 million of bbls. which are to be accredited to the grain growing states. Put the price at six dollars—a fair average—and we have an amount of $136,000,000 as the value of a single article of Northern and Western produce."

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Rail Paths are light rail roads. They are designed to be extended where Rail Roads would be too costly, and would not be needed. Rail roads are made of great solidity, and consequently at great expence. They are made to sustain on every eight feet of length the weight of about 20,000 pounds, in addition to the strain of this weight in drawing a train of cars: for some locomotives weigh more than 16,000 pounds. Rail paths may be made, therefore, much lighter and cheaper than rail roads. I will suppose them made light and cheap enough for men to propel themselves, or draw loads upon them. The structure, in this case, would require very little labor or material. Thus a ravine might be easily crossed by a cheap bridge; or the path might be made on posts across such hollows, and over low grounds, where a rail road would require a heavy embankment of earth and stone. As the Path might be extended at little expense on account of its cheapness, it might be carried round a hill, instead of being made through it, by a costly excavation. The Rail Road from Charleston to Hamburg, opposite Augusta, Ga., 136 miles in length was built partly on posts, and was used before the embankment was made, by filling up with earth under the rails.

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Of various estimates of the average strength of men, I take that of Farey, a recent writer on the steam engine. He says that the power of man may be assumed equal to the raising of 3750 lb. one foot high in a minute, and that a stout laborer will continue to work at this rate eight hours a day. This would be 62 1-2 lb. raised one foot high each second; but to raise 62 1-2 lb. one foot high would be equal to moving 200 times 62 1-2 lb. one foot on a level rail road; that is, a man could move 12500 lb. one foot in a second, or, which is equal, 1250 lb. 10 feet in a second. In a minute, therefore, he could move 1250 lb. 600 feet: and in an hour he could move it 36000 feet or 6 3-4 miles. He could exert this power eight hours a day, and each day therefore he could exert the force equivalent to propelling a load of 1250 lb. fifty-four miles in a day.

Of course a man could not travel 54 miles a day, and draw such a load; but he must move himself in his light car by using his strength in giving motion to its wheels by a crank, or some other contrivance. An ingenious, but not a philosophic gentleman, of this State, contrived a carriage for a man to move himself on common roads. A man acquainted with facts relating to such matters might have forseen that it would not succeed. The power that would move 600 lb. on a level rail road, would move only one-twelfth of this weight, or 50 lb., on a common level road; and then there are ascents on common roads, which are avoided on rail roads. As easily as a man could wheel 50 lb. on a common level road, he could move 600 lb. on a level rail road; or, as easily as he could wheel 100 1-4 lb. on a common level road, he could propel 1250 lb. on a level rail road.

But, could Rail Paths be made without too great inclinations, or too great expense? Most certainly. Look over the country and observe how vallies are cut out by water courses, even through hilly and mountainous regions, as though they were excavations expressly designed for the passage of men for business, and for all the purposes of social life. Thus the country may be traversed extensively without encountering high ascents. From the tide on the Kennebec at Hallowell 121 miles to Moose River Bridge, the average ascent is only 10 1-4 feet per mile, on one foot in 515 feet. Thus the force that would draw up one pound, would, in addi- 51[illegible] sc[illegible] ab[illegible] as ne[illegible] miles, [illegible] ghany, from Olean to Pittsburg, 250 miles, falls only 2 1-2 feet per mile. From Barnet, Vt., to Hartford, Conn. 220 miles, the descent on the Connecticut is but 2 1-2 feet per mile.

If, however, we should leave the vallies and streams, and take the course of Rail Roads, the departures from a level would still be small. From Portland to Quebec the whole distance is 277 miles, and 249 of this are attended by gradations not exceeding 35 feet per mile. The average rise and fall per mile would be far less than this. The route of the Rail Road from Worcester to Hartford is through a hilly country; and yet the average rise per mile is but six feet, and the average fall but 12 1-2 feet. The Rail Paths here contemplated would be only partially extended through the country, namely, along the vallies, until they reach large Rail Roads, or places of business, and the inclination would be less than stated above, and would not generally exceed 10 feet per mile in one direction.

The plan of Rail Paths particularly concerns our agricultural population; for the remoteness of their dwellings from mills, markets, schools and meetings is a serious inconvenience. The cost of transportation is a dead loss to the public, and it is immense. It can be easily estimated how much more valuable produce would be, if one horse could draw, at nearly all seasons of the year, twelve times as much as he can now draw at some periods only, when the roads are in a good state, or, if a man by his own strength could draw twelve bushels of grain as easily as he could now wheel one on level ground.

Another view however is to be taken of this matter. I consider that greater facilities for getting to schools, to religious meetings, and to all the means of intellectual and moral improvement are of far higher importance than increased facilities for business. As to their physical condition men can live well enough in the present state of the arts and sciences, and of means of communication, if they will only be industrious and moral. But if they will not maintain correct habits, greater natural, and artificial advantages will only make them more miserable by presenting new means of indulgence and new temptations to vice. I would then supply greater facilities for access to schools and religious meetings for the improvement of the mind and heart: and Rail Paths may furnish these.

I suppose then that to walk two miles is equivalent to half an hour's work; but in half an hour a laboring man, according to the calculations made in this article, might move a load of 1250 lb. more than three miles on a level rail road. If a youth has half the strength of a laboring man, he could as easily move a load of 675 lb. three miles as walk two miles; or he could as easily move a load of 337 1-2 lb., on a level rail road, three miles, as walk one.

In ascending elevations, greater strength must be expended; and it is not pretended that we can transport ourselves up our wholesome hills with ease: for iron rails will not suspend the laws of gravitation. But the custom once in vogue of perching churches and academies on the highest swells in town is growing into disuse; and a water level is more generally sought for roads; and to a great and useful extent therefore Rail Paths may be employed for social intercourse, because this

[illegible] ping, for a few successive years, and return to it nothing in the form of manure, and the work is done, or far advanced. In this business we have shown ourselves to be no mean adepts. But it does require science, and art, and perseverance, and capital, to restore fertility to a soil which has become exhausted. This we have not yet sufficiently learned; but it should be our next lesson; and the sooner we begin the sooner shall we profit by it.

Agricultural improvement is slowly developed, at least to superficial observers. It requires years to renovate to fertility of an exhausted soil—to improve the stock of a farm; or to realize the benefits which result from draining, from alternating crops, and from root culture. We are much in the habit of calculating upon *immediate* gains, without looking to remote and ultimate benefits. We saw not the change, when the law of 1819 was in force, because its benefits were but partially developed. But we now hear the remark from hundreds, that the appropriation of 1819, was one of the most beneficial to the state that has ever been made by the legislature. The popular vote of the state would never have sanctioned the construction of the Erie and Champlain canals; and yet the wisdom of the measure is now sanctioned by an enlightened world. Although the construction of these canals, may have operated prejudically to some individuals and districts, yet the benefits which have resulted to the whole state have amply compensated for any personal inconvenience or injury they may have caused. So with the law to encourage agriculture; many did not foresee its benefits, who now acknowledge that they are palpable and important. We must judge of public measures by their fruit; and before we are competent to do this, the seed must germinate, the plant grow and blossom, and the fruit nature. This is particularly the case in all measures to improve agriculture. It is the province of wisdom to look ahead—to sow the useful seed, and to wait the coming harvest for the recompense. We must sow in the spring—and cultivate well in the summer, if we would gather an abundant harvest, in autumn.

We may almost lay it down as a mixim, that THE MENTAL AND MORAL CONDITION OF AN AGRICULTURAL DISTRICT, IS IN THE RATIO OF ITS IMPROVEMENT IN HUSBANDRY. To borrow the spirit of a political saying—*as goes agriculture, so goes the State.* There is certainly much truth in the remark, that where the farming is slovenly and bad, ignorance, indolence, and vice, must generally abound; and that where agricultural improvement is most advanced, the population are most industrious, most intelligent and most moral. Knowledge begets a love of knowledge; and when a man has acquired enough of it to convince him of his farming capital, and he is anxious to increase his stock of it, as the readiest means of improving his condition in life, independent of the mental pleasures which it imparts.—But not having acquired the requisite degree to enable him to appreciate its value, or to show him the defects of his system of management, he

plods on, with listless indefference, in the ways of his fathers; and as great success now-a-days, seldom rewards such labors, he too often becomes spiritless ond dissatified, and relaxes into indolence, of which vice is too frequently the concomitant.

Under the existing state of things, how does it become us to act? What are we to do? Shall we fold our arms, leave agriculture to decline further, or to shift for itself, and depend upon more propitious seasons, and other Providential interpositions, to supply our wants? Shall we depend upon the cotton, rice, and tobacco of the south, which constitute our almost entire exports, to pay for the commodities which we consume in the north? Or shall we, animated by the enterprise and love of independence which were wont to animate our fathers—take in hand resolutely to provide abundantly for ourselves, encouraging and enlightening agriculture, elevating its character,

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farmers, are deriving instructions, and improving their practice, by the perusal of these journals; and it is not extravagant to say, that the benefits they are dispensing to the nation are equivalent to millions of dollars every year. But what is one hundred thousand compared to the gross agricultural population of the union? and how much greater would be their benefits if these Journals had access to every farm house, or even to every school-house, in the State? Besides giving much that is useful in the science, or the first principles of husbandry, they are continually advertising their readers of every improvement which is being made in the practical operations of the farm—of new seeds, and plants, and the mode of cultivating them, and of every improvement in labor-saving machines. In twelve numbers of the Cultivator may be noticed more than a hundred and twenty communications, mostly from practical farmers, residing in the different states, detailing their practice in different departments of husbandry, thus making their improvements known, in a short time, to its twenty thousand patrons.

By thus concentrating, as it were in a focus, the practical knowledge of the country, and then scattering it, like the solar rays, into every coner of the land, to fructify the earth, and by thus rendering it subservient to the benefit of all, some individuals have been enabled to obtain a clear profit of fifty, one hundred, and even one hundred and fifty dollars, on an acre of corn, or an acre of Swedish turnips, who had never before obtained a profit of thirty dollars an acre from either. And the benefits of these splendid results are not confined to the individuals who effected them: they are heralded in the agricultural journals; become known all over the country, and every new and successful effort at improvement, soon has its fifty, hundred, and its thousand imitators.

Suppose, for instance, what we hope will yet prove true, that an individual should discover an effectual preventive of the ravages of the Hessian fly, or grain worm—instead of benefiting him and a few neighbors, or becoming gradually known, as in olden times, the knowledge of it would now be spread in a few days, by the agricultural periodicals, into every corner of the land, and the advantages of the discoverery would thus amount to millions in a single year. So with every other improvement in husbandry. It is not the province, nor is it the study of news journals and literary editors to deal extensively in agricultural concerns. They seldom publish even the incidental notices which are designed to subserve the interests of husbandry, without a special request, and a fee in the bargain, as though *they* had no personal interest in the progress of agricultural improvement. We would infer from these premises, that every man will promote his interest, and benefit the public, by patronising and endeavoring to extend the circulation of our agricultural papers. They tend to no possible evil, while they are certainly calculated to do much public good.

Another means of facilitating agricultural improvement, is to introduce class books, into our common schools, for the senior boys, which shall teach those elementary principles of science which are indispensable to the successful practice of agriculture. A boy may be almost as easily taught to analyze soils, and to comprehend to leading principles of animal and vegetable physiology, as he can to commit to memory pages of matter, the knowledge of which seldom serves him any useful purpose in manhood. We must begin in youth, if we would bring about any material improvement in the habits of society. The good seed that is sown in the spring time of life is never lost,—it will ultimately sprout, and grow, and give its increase, as sure as the grain which we deposite in a fertile soil. The tree *will* grow as the twig is bent. Youth is the season to get instruction in the principles of the business which is to constitute the employment of life; and the more the knowledge which boys acquire in these prin-

tice of agriculture. We would carry something of the theory into the primary schools, and much of the practice into the school of science. Veterinary schools, to instruct in the anatomy and management of domestic animals, have long been established in Europe; their usefulness has been highly extolled, and their numbers are increasing. Switzerland, Prussia and France have also their schools, in which the science and practice of agriculture are taught to hundreds of young men, who are thereby enabled to manage their estates, with greater benefit to themselves and the public or to obtain honorable and lucrative situations as managers for others. We give bounties on our fisheries, to make them a nursery of seamen; but we give none upon agriculture, which is the best nursery of freemen. We spend millions annually to protect our commerce; but we give nothing to improve agriculture, which is the basis and support of that commerce. We protect our manufactures by a heavy tariff; yet agriculture, which furnishes the raw materials, and boys the fabrics, which the manufacturer consumes and vends, is left to protect itself. We have expended nearly, three millions in this state, to aid in educating almost exclusively professional and other gentlemen; and yet we have given nothing exclusively to educate our agriculturists, who constitute the great mass of our population. And yet there is probably no employment in life capable of being more benefited by a professional education—none in which a professional education would conduce more to the public prosperity—than that of managing our farms. A proper knowledge of soils, manure, vegetables and animals—of the agency of caloric, of moisture, of the atmosphere, and of light, in the economy of vegetable and animal growth—are all of great use to the farmer, and yet in what existing school can he acquire this knowledge, during the period of life in which he ought to obtain his practical knowledge?

All impressions of general reform, to be successful, must be first made upon the ductile minds of the younger population. The old are apt to be too obstinately wedded to their juvenile habits and prejudices. Men are apt to grow up in the creeds in which they are instructed,—be they Christian, Mahomeden or Pagan,—be they of good or bad husbandry. And if our youth are early instructed in the first elements of agriculture, and taught to consider it, what it truly is, an employment eminently calculated, above all others, to promote individual and national prosperity and happiness, they will aspire to honor and distinction in its labors—and will not so generally press to the cities—to the bar and the counter—for the means of gratifying a laudable ambition. And society will reap an abundant reward from the change. We will illustrate this by an historical fact. Ernest, former Duke of Saxe Gotha, had his people instructed by compendiums of every kind of useful knowledge, incluing music and drawing, that were put into the hands of youth in all country schools; and which in a few years entirely changed the face of his principality: and "it is amazing," adds our author, who wrote some years afterwards, "to observe the different eradiations of genius, in this and the adjacent circles. The effect was alike beneficial in the improvement of the soil and mind. And the example of Saxe Gotha, probably led to the excellent system of school instruction in agriculture, which has since been introduced by Prussia, and most of the German States.

It has been stated, as an objection to the establishment of agricultural schools, that they would be only accessible to the rich. The objection, even if well founded, would not go to lesson their value of the State: For if we would convert a few hundred drones, as the sons of rich men may generally be termed, into working bees, the public, as well as the young men themselves, would certainly be gainers by the transformation. The complaint is that we have many consumers, and

the rich, be influence on thus to im- h, would be n of socie- schools can a few hun- wealth—or habits—into wholesome, industrious [illegible] agricultural pursuits will be more respectable, and more followed; and we venture to predict, that then we shall not long continue to do, what we have done—import potatoes from Ireland and Germany, hay and oats from Scotland, eggs from France, and bread stuffs from all the countries of Europe, including the dominions of the autocrat of Russia, and of the Grand Turk.

But it is not exactly true, that the rich alone would find access into agricultural schools, were such established. The rich rely upon their paternal wealth, and have not often the ambition to become useful, at least by the habits of manual labor, which would be rigidly required in such schools. The schools would be filled with the youth from all classes of society, who aspired to fortune and independence, by a manly exercise of their mental and physical powers—the young men of this description, even from the poorer classes, do obtain admission into literary institutions, and they would into agricultural ones with greater facility—because the terms of admission here would be more reasonable—and with equal prospect of distinction and usefulness in after life. But whether these schools should be filled from the rich or poorer classes, or, as we have supposed, from all classes indiscriminately, a certain and great public good would result from their establishment: the pupils would go to swell the producing classes of society, with habits of application and usefulness, minds imbued with scientific knowledge, bodies hale and robust, and hands practiced in all the manuel operations of the farm.

It verily seems to us certain, that if the importance of the subjects which we have discussed, could be justly appreciated by the community at large, every class of our citizens would concur in the propriety of a united effort to improve the condition of our husbandry, and of speedily adopting the measures we have suggested, or others equally aviling, to produce the desired result.

THE GRAIN GROWING STATES.—Much is said of the magnitude and importance of the produce of the South, which is estimated at an hundred millions of dollars. Let us look a moment at the agricultural products—to say nothing of the manufactures—of the northern, western and middle States. A Buffalo paper says:—

"In our article a few days since, upon the subject of the flour, we stated the produce of last year, to be, in round numbers, 29,000,000 of barrels.—Assuming 24,000,000 to be the average annual yield, and supposing that seven-eights of this quantity are raised in the states not considered as planting States, in the whole or in part, and we have 21 million of bbls. which are to be accredited to the grain growing states. Put the price at six dollars—a fair average—and we have an amount of $136,000,000 as the value of a single article of Northern and Western produce."

For the Maine Farmer.

RAIL PATHS.

Rail Paths are light rail roads. They are designed to be extended where Rail Roads would be too costly, and would not be needed. Rail roads are made of great solidity, and consequently at great expence. They are made to sustain on every eight feet of length the weight of about 20,000 pounds, in addition to the strain of this weight in drawing a train of cars: for some locomotives weigh more than 16,000 pounds. Rail paths may be made, therefore, much lighter and cheaper than rail roads. I will suppose them made light and cheap enough for men to propel themselves, or draw loads upon them. The structure, in this case, would require very little labor or material. Thus a ravine might be easily crossed by a cheap bridge; or the path might be made on posts across such hollows, and over low grounds, where a rail road would require a heavy embankment of earth and stone. As the Path might be extended at little expense on account of its cheapness, it might be carried round a hill, instead of being made through it, by a costly excavation. The Rail Road from Charleston to Hamburg, opposite Augusta, Ga., 136 miles in length was built partly on posts, and was used before the embankment was made, by filling up with earth under the rails.

Some calculations may shew that human strength may be usefully applied to Rail Paths to some extent. Pambour found that, on a level rail road, it required only the traction of eight pounds to draw a load of 2240 pounds, where the opposition of the air was broken by a carriage going before. If a carriage moves separately at the rate of 12 miles per hour, the resistance is 11 65-100 pounds per 2240 pounds. At this rate the traction of 2000 lb. would be 10 4-10 lb. At a lower speed than 12 miles per hour the resistance would be much less; and we may estimate therefore the traction of 2000 lb. at 10 lb., or 200 at 1 lb. That is, as easily as a man can draw up a weight of one pound perpendicularly, he can draw 200 lb. on a level rail road.

Of various estimates of the average strength of men, I take that of Farey, a recent writer on the steam engine. He says that the power of man may be assumed equal to the raising of 3750 lb. one foot high in a minute, and that a stout laborer will continue to work at this rate eight hours a day. This would be 62 1-2 lb. raised one foot high each second; but to raise 62 1-2 lb. one foot high would be equal to moving 200 times 62 1-2 lb. one foot on a level rail road; that is, a man could move 12500 lb. one foot in a second, or, which is equal, 1250 lb. 10 feet in a second. In a minute, therefore, he could move 1250 lb. 600 feet: and in an hour he could move it 36000 feet or 6 3-4 miles. He could exert this power eight hours a day, and each day therefore he could exert the force equivalent to propelling a load of 1250 lb. fifty-four miles in a day.

Of course a man could not travel 54 miles a day, and draw such a load; but he must move himself in his light car by using his strength in giving motion to its wheels by a crank, or some other contrivance. An ingenious, but not a philosophic gentleman, of this State, contrived a carriage for a man to move himself on common roads. A man acquainted with facts relating to such matters might have forseen that it would not succeed. The power that would move 600 lb. on a level rail road, would move only one-twelfth of this weight, or 50 lb., on a common level road; and then there are ascents on common roads, which are avoided on rail roads. As easily as a man could wheel 50 lb. on a common level road, he could move 600 lb. on a level rail road; or, as easily as he could wheel 100 1-4 lb. on a common level road, he could propel 1250 lb. on a level rail road.

But, could Rail Paths be made without too great inclinations, or too great expense? Most certainly. Look over the country and observe how vallies are cut out by water courses, even through hilly and mountainous regions, as though they were excavations expressly designed for the passage of men for business, and for all the purposes of social life. Thus the country may be traversed extensively without encountering high ascents. From the tide on the Kennebec at Hallowell 121 miles to Moose River Bridge, the average ascent is only 10 1-4 feet per mile, on one foot in 515 feet. Thus the force, that would draw up one pound, would, in addition to the traction on a level rail road, draw up 515 lb. on this ascent. On the other hand the descent, if it were every where equal, would be just about enough to make a car roll down of itself.

The ascent on the Penobscot is about the same as on the Kennebec. Streams of water keep very nearly an average level. The Ganges, in 1800 miles, falls but 7 1-3 inches in a mile. The Alleghany, from Olean to Pittsburg, 250 miles, falls only 2 1-2 feet per mile. From Barnet, Vt., to Hartford, Conn. 220 miles, the descent on the Connecticut is but 2 1-2 feet per mile.

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The plan of Rail Paths particularly concerns our agricultural population; for the remoteness of their dwellings from mills, markets, schools and meetings is a serious inconvenience. The cost of transportation is a dead loss to the public, and it is immense. It can be easily estimated how much more valuable produce would be, if one horse could draw, at nearly all seasons of the year, twelve times as much as he can now draw at some periods only, when the roads are in a good state, or, if a man by his own strength could draw twelve bushels of grain as easily as he could now wheel one on level ground.

Another view however is to be taken of this matter. I consider that greater facilities for getting to schools, to religious meetings, and to all the means of intellectual and moral improvement are of far higher importance than increased facilities for business. As to their physical condition men can live well enough in the present state of the arts and sciences, and of means of communication, if they will only be industrious and moral. But if they will not maintain correct habits, greater natural, and artificial advantages will only make them more miserable by presenting new means of indulgence and new temptations to vice. I would then supply greater facilities for access to schools and religious meetings for the improvement of the mind and heart: and Rail Paths may furnish these.

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In ascending elevations, greater strength must be expended; and it is not pretended that we can transport ourselves up our wholesome hills with ease: for iron rails will not suspend the laws of gravitation. But the custom once in vogue of perching churches and academies on the highest swells in town is growing into disuse; and a water level is more generally sought for roads; and to a great and useful extent therefore Rail Paths may be employed for social intercourse, because this intercourse is conducted already along vallies to a great extent, and may be extended through them much more.

PUBLICOLA.

JUDGE BUEL'S REPORT.

(Concluded.)

It requires no science, and very little art, to wear out and exhaust the most fertile soil. The process is simple; take from it all you can, by close cropping, for a few successive years, and return to it nothing in the form of manure, and the work is done, or far advanced. In this business we have shown ourselves to be no mean adepts. But it does require science, and art, and perseverance, and capital, to restore fertility to a soil which has become exhausted. This we have not yet sufficiently learned; but it should be our next lesson; and the sooner we begin the sooner shall we profit by it.

Agricultural improvement is slowly developed, at least to superficial observers. It requires years to renovate to fertility of an exhausted soil—to improve the stock of a farm; or to realize the benefits which result from draining, from alternating crops, and from root culture. We are much in the habit of calculating upon *immediate* gains, without looking to remote and ultimate benefits. We saw not the change, when the law of 1819 was in force, because its benefits were but partially developed. But we now hear the remark from hundreds, that the appropriation of 1819, was one of the most beneficial to the state that has ever been made by the legislature. The popular vote of the state would never have sanctioned the construction of the Erie and Champlain canals; and yet the wisdom of the measure is now sanctioned by an enlightened world. Although the construction of these canals, may have operated prejudically to some individuals and districts, yet the benefits which have resulted to the whole state have amply compensated for any personal inconvenience or injury they may have caused. So with the law to encourage agriculture; many did not foresee its benefits, who now acknowledge that they are palpable and important. We must judge of public measures by their fruit; and before we are competent to do this, the seed must germinate, the plant grow and blossom, and the fruit nature. This is particularly the case in all measures to improve agriculture. It is the province of wisdom to look ahead—to sow the useful seed, and to wait the coming harvest for the recompense. We must sow in the spring—and cultivate well in the summer, if we would gather an abundant harvest, in autumn.

We may almost lay it down as a mixim, that THE MENTAL AND MORAL CONDITION OF AN AGRICULTURAL DISTRICT, IS IN THE RATIO OF ITS IMPROVEMENT IN HUSBANDRY. To borrow the spirit of a political saying—*as goes agriculture, so goes the State.* There is certainly much truth in the remark, that where the farming is slovenly and bad, ignorance, indolence, and vice, must generally abound; and that where agricultural improvement is most advanced, the population are most industrious, most intelligent and most moral. Knowledge begets a love of knowledge; and when a man has acquired enough of it to convince him of his farming capital, and he is anxious to increase his stock of it, as the readiest means of improving his condition in life, independent of the mental pleasures which it imparts.—But not having acquired the requisite degree to enable him to appreciate its value, or to show him the defects of his system of management, he

plods on, with listless indefference, in the ways of his fathers; and as great success now-a-days, seldom rewards such labors, he too often becomes spiritless ond dissatified, and relaxes into indolence, of which vice is too frequently the concomitant.

Under the existing state of things, how does it become us to act? What are we to do? Shall we fold our arms, leave agriculture to decline further, or to shift for itself, and depend upon more propitious seasons, and other Providential interpositions, to supply our wants? Shall we depend upon the cotton, rice, and tobacco of the south, which constitute our almost entire exports, to pay for the commodities which we consume in the north? Or shall we, animated by the enterprise and love of independence which were wont to animate our fathers—take in hand resolutely to provide abundantly for ourselves, encouraging and enlightening agriculture, elevating its character, and stimulating it to new efforts, by suitable honors, and rewards?

As regards the means of improvement, much has been done, and much is doing, by the agricultural periodicals of the day. The first of these was established at Baltimore, by John S. Skinner, in 1819; and we can now enumerate nearly twenty, that are diffusing light, awakening enterprise, and inciting to industry, in every section of our country—Probably one hundred thousand farmers, are deriving instructions, and improving their practice, by the perusal of these journals; and it is not extravagant to say, that the benefits they are dispensing to the nation are equivalent to millions of dollars every year. But what is one hundred thousand compared to the gross agricultural population of the union? and how much greater would be their benefits if these Journals had access to every farm house, or even to every school-house, in the State? Besides giving much that is useful in the science, or the first principles of husbandry, they are continually advertising their readers of every improvement which is being made in the practical operations of the farm—of new seeds, and plants, and the mode of cultivating them, and of every improvement in labor-saving machines. In twelve numbers of the Cultivator may be noticed more than a hundred and twenty communications, mostly from practical farmers, residing in the different states, detailing their practice in different departments of husbandry, thus making their improvements known, in a short time, to its twenty thousand patrons.

By thus concentrating, as it were in a focus, the practical knowledge of the country, and then scattering it, like the solar rays, into every coner of the land, to fructify the earth, and by thus rendering it subservient to the benefit of all, some individuals have been enabled to obtain a clear profit of fifty, one hundred, and even one hundred and fifty dollars, on an acre of corn, or an acre of Swedish turnips, who had never before obtained a profit of thirty dollars an acre from either. And the benefits of these splendid results are not confined to the individuals who effected them: they are heralded in the agricaltural journals; become known all over the country, and every new and successful effort at improvement, soon has its fifty, hundred, and its thousand imitators.

Suppose, for instance, what we hope will yet prove true, that an individual should discover an effectual preventive of the ravages of the Hessian fly, or grain worm—instead of benefiting him and a few neighbors, or becoming gradually known, as in olden times, the knowledge of it would now be spread in a few days, by the agricultural periodicals, into every corner of the land, and the advantages of the discoverery would thus amount to millions in a single year. So with every other improvement in husbandry. It is not the province, nor is it the study of news journals and literary editors to deal extensively in agricultural concerns. They seldom publish even the incidental notices which are designed to subserve the interests of husbandry, without a special request, and a fee in the bargain, as though *they* had no personal interest in the progress of agricultural improvement. We would infer from these premises, that every man will promote his interest, and benefit the public, by patronising and endeavoring to extend the circulation of our agricultural papers. They tend to no possible evil, while they are certainly calculated to do much public good.

Another means of facilitating agricultural improvement, is to introduce class books, into our common schools, for the senior boys, which shall teach those elementary principles of science which are indispensable to the successful practice of agriculture. A boy may be almost as easily taught to analyze soils, and to comprehend to leading principles of animal and vegetable physiology, as he can to commit to memory pages of matter, the knowledge of which seldom serves him any useful purpose in manhood. We must begin in youth, if we would bring about any material improvement in the habits of society. The good seed that is sown in the spring time of life is never lost,—it will ultimately sprout, and grow, and give its increase, as sure as the grain which we deposite in a fertile soil. The tree *will* grow as the twig is bent. Youth is the season to get instruction in the principles of the business which is to constitute the employment of life; and the more the knowledge which boys acquire in these principles, before they start in life for themselves, the more likely they are to prosper and become useful to society. The time that the senior boys in school devote to the business of the farm, will give to studies which are connected with their present and future business, an interest and an influence which will be as abiding as life.

But we would go farther in the business of agricultural instruction; we would establish schools to teach simultaneously, both the theory and practice of agriculture. We would carry something of the theory into the primary schools, and much of the practice into the school of science. Veterinary schools, to instruct in the anatomy and management of domestic animals, have long been established in Europe; their usefulness has been highly extolled, and their numbers are increasing. Switzerland, Prussia and France have also their schools, in which the science and practice of agriculture are taught to hundreds of young men, who are thereby enabled to manage their estates, with greater benefit to themselves and the public or to obtain honorable and lucrative situations as managers for others. We give bounties on our fisheries, to make them a nursery of seamen; but we give none upon agriculture, which is the best nursery of freemen. We spend millions annually to protect our commerce; but we give nothing to improve agriculture, which is the basis and support of that commerce. We protect our manufactures by a heavy tariff; yet agriculture, which furnishes the raw materials, and boys the fabrics, which the manufacturer consumes and vends, is left to protect itself. We have expended nearly, three millions in this state, to aid in educating almost exclusively professional and other gentlemen; and yet we have given nothing exclusively to educate our agriculturists, who constitute the great mass of our population. And yet there is probably no employment in life capable of being more benefited by a professional education—none in which a professional education would conduce more to the public prosperity—than that of managing our farms. A proper knowledge of soils, manure, vegetables and animals—of the agency of caloric, of moisture, of the atmosphere, and of light, in the economy of vegetable and animal growth—are all of great use to the farmer, and yet in what existing school can he acquire this knowledge, during the period of life in which he ought to obtain his practical knowledge?

All impressions of general reform, to be successful, must be first made upon the ductile minds of the younger population. The old are apt to be too obstinately wedded to their juvenile habits and prejudices. Men are apt to grow up in the creeds in which they are instructed,—be they Christian, Mahomeden or Pagan,—be they of good or bad husbandry. And if our youth are early instructed in the first elements of agriculture, and taught to consider it, what it truly is, an employment eminently calculated, above all others, to promote individual and national prosperity and happiness, they will aspire to honor and distinction in its labors—and will not so generally press to the cities—to the bar and the counter—for the means of gratifying a laudable ambition. And society will reap an abundant reward from the change. We will illustrate this by an historical fact. Ernest, former Duke of Saxe Gotha, had his people instructed by compendiums of every kind of useful knowledge, incluing music and drawing, that were put into the hands of youth in all country schools; and which in a few years entirely changed the face of his principality: and "it is amazing," adds our author, who wrote some years afterwards, "to observe the different eradiations of genius, in this and the adjacent circles. The effect was alike beneficial in the improvement of the soil and mind. And the example of Saxe Gotha, probably led to the excellent system of school instruction in agriculture, which has since been introduced by Prussia, and most of the German States.

It has been stated, as an objection to the establishment of agricultural schools, that they would be only accessible to the rich. The objection, even if well founded, would not go to lesson their value of the State: For if we would convert a few hundred drones, as the sons of rich men may generally be termed, into working bees, the public, as well as the young men themselves, would certainly be gainers by the transformation. The complaint is that we have many consumers, and too few producers. This would tend to restore an equilibrium: For the examples of the rich, be they good or bad, have an imposing influence on the middling and lower classes; and thus to improve the habits and morals of the rich, would be the surest way to improve the condition of society. Hence, therefore, if agricultural schools can be instrumental in annually converting a few hundred of the idle and dissipated sons of wealth—or rather in preserving them from these habits—into wholesome, industrious farmers, agricultural pursuits will be more respectable, and more followed; and we venture to predict, that then we shall not long continue to do, what we have done—import potatoes from Ireland and Germany, hay and oats from Scotland, eggs from France, and bread stuffs from all the countries of Europe, including the dominions of the autocrat of Russia, and of the Grand Turk.

But it is not exactly true, that the rich alone would find access into agricultural schools, were such established. The rich rely upon their paternal wealth, and have not often the ambition to become useful, at least by the habits of manual labor, which would be rigidly required in such schools. The schools would be filled with the youth from all classes of society, who aspired to fortune and independence, by a manly exercise of their mental and physical powers—the young men of this description, even from the poorer classes, do obtain admission into literary institutions, and they would into agricultural ones with greater facility—because the terms of admission here would be more reasonable—and with equal prospect of distinction and usefulness in after life. But whether these schools should be filled from the rich or poorer classes, or, as we have supposed, from all classes indiscriminately, a certain and great public good would result from their establishment: the pupils would go to swell the producing classes of society, with habits of application and usefulness, minds imbued with scientific knowledge, bodies hale and robust, and hands practiced in all the manuel operations of the farm.

It verily seems to us certain, that if the importance of the subjects which we have discussed, could be justly appreciated by the community at large, every class of our citizens would concur in the propriety of a united effort to improve the condition of our husbandry, and of speedily adopting the measures we have suggested, or others equally aviling, to produce the desired result.

THE GRAIN GROWING STATES.—Much is said of the magnitude and importance of the produce of the South, which is estimated at an hundred millions of dollars. Let us look a moment at the agricultural products—to say nothing of the manufactures—of the northern, western and middle States. A Buffalo paper says:—

"In our article a few days since, upon the subject of the flour, we stated the produce of last year, to be, in round numbers, 29,000,000 of barrels.—Assuming 24,000,000 to be the average annual yield, and supposing that seven-eights of this quantity are raised in the states not considered as planting States, in the whole or in part, and we have 21 million of bbls. which are to be accredited to the grain growing states. Put the price at six dollars—a fair average—and we have an amount of $136,000,000 as the value of a single article of Northern and Western produce."

LEGAL.

BY MARCIAN SEAVEY.

HIGHWAY TAX.

It is required of every town at some public meeting of the inhabitants thereof, regularly notified and warned to vote and raise such sums of money to be expended in labor and materials in making and repairing highways therein as they shall determine necessary for that purpose. Such tax however cannot be collected in money, except by a vote of a town legally authorized to raise money to repair highways. And the Assessors shall assess the same on the polls and rateable estate, personal and real, of the inhabitants, residents and non-residents of their town, as other town charges are by law assessed, and on or before the first day of June, deliver to each surveyor a list of the persons and the sums at which they are severally assesed for his limits; and two thirds of the sum at least which shall be agreed upon and granted by any town for making or repairing the highways, shall be laid out and expended for that purpose before the first day of July next after granting the same; and the surveyors shall give reasonable notice (in writing if desired) to each person in his list of the sum he is assessed to the highways, and also to the inhabitants within his district assessed as aforesaid, forty-eight hours notice, (extraordinary casualty excepted,) of the times and places he shall appoint for providing materials and laboring, to the end each person may have an opportunity to work on the highways in person or by his substitute, or with his oxen, horses, cart and plough, at the rates and prices the town shall affix to such labor, to the full amount of the sum at which he is assessed, or he may pay the surveyor in money the sum he is assessed, in which case the surveyor shall carefully expend the sums thus paid, in labor and materials for repairing the highways in his limits, according to his best discretion. And the surveyor, at the expiration of his term, shall render to the Assessors for time being, a list of such persons as shall have been deficient, (if any such there be,) in working out their highway rate, or otherwise paying him the sum assessed therefor; which deficient sums shall by the Assessors be put in a distinct column, in the next assessment for the town tax, and collected by the Constable or Collector thereof, as other town taxes are collected, and paid into the town treasury for the use of the town.

The surveyors, after being chosen and sworn, shall have full power and authority to cut down, lop off, dig up and remove all sorts of trees, bushes, stones, fences, rails, gates, bars, inclosures, or other matter or thing that shall any way straiten, hurt, hinder, or incommode the highway, and also to dig for stone, gravel, clay, marle, sand or earth, in any land not planted or inclosed, and the materials thus dug up to remove to such place or places in the highways, for the repair and amendment thereof as they shall determine necessary. *Provided always*, That no surveyor of highways shall cause any water course occasioned by the wash of any highway to be conveyed by the side of such highway as to incommode any person's house, store, shop, or other building, or to obstruct any person or persons in the prosecution of his or her business or occupation, without the approbation and consent of the Selectmen of such town or other place signified in writing to such surveyor.

Every town may at their annual meeting or any meeting warned for that purpose, authorize their surveyors, or any other person or persons to enter into any contract or contracts for making or repairing the highways within the same or any part thereof; and may also empower their surveyors of highways to collect taxes for making and repairing the ways which shall not be paid in labor or otherwise within the time limited by law, or such periods as may be agreed upon by such town, and for that purpose the Assessors shall deliver to them warrants of distress which shall be in the form prescribed by law for collecting other town taxes, with the necessary alteration; or they may deliver to the Collector or Collectors of taxes a warrant for collecting the deficiency in any highway tax which the Collector is hereby empowed and required to levy in the same way and manner as other taxes are by law to be collected, and pay the same over to the surveyor or surveyors, who shall be held to account with the Selectmen for the expenditure thereof. And if any surveyor who shall receive his rate bill of the Selectmen or Assessors of any town shall neglect to exhibit the same to them on the first Monday of July annually, and also at the expiration of the term for which he shall be appointed, and at those times respectively to render an account of all moneys that have been expended on the ways, he for each offence shall forfeit and pay twenty dollars, to be recovered in an action of debt with costs of suit by the said Treasurer to the use of the town.

Form of a Warrant to a Surveyor of Highways.

To J. A. D. one of the Surveyors of Highways in the town of B.

Herewith is committed to you a list of the persons and the sums at which they are severally assessed for your limits, each one his respective proportion, therein set down, of the sum total of Dollars Cents, voted by said town, at their last annual meeting to be raised and expended in labor and materials on the highways therein; you are to allow (here insert the rates and prices the town shall affix to labor, oxen, horses, cart and plough) and in case of payment in money of the sums assessed, or any of them, you are to cause the sums thus paid to be carefully expended in labor and materials for repairing the highways in your limits. You are to cause two-thirds at least of the sum above voted, to be expended for the purposes aforesaid, before the first day of July next, and the remainder on or before the day of

And you are hereby required at the expiration of said term to render to the Assessors of the said town, for the time being, a list of such persons as shall have been deficient (if any such there be) in working out their highway rate, or otherwise paying you the sum assessed therefor. Given under our hands this day of A. D. 18 .

C. C.
J. P. } Assessors of
E. R. } said town.

If the whole amount of the tax, or a larger proportion than two-thirds is to be expended before the first of July, the above form should be varied accordingly.

Education.

REPORT

Of the School Committee of the town of Winthrop, for the year ending March 25, 1838.

The schools in town the past year, have exhibited a good degree of interest, and the progress made in the several studies which have been attended to, is encouraging.

Many of our youth are rapidly acquiring an education, which indicates an honorable future character of the town, and a preparation for their usefulness in society.

There are in town, 760 scholars. Most of those of suitable age, are making commendable progress in Arithmetic, English Grammar and Geography; 24 are studying History, 36 Phylosophy, 13 Algebra, 7 Astronomy, 5 Chemistry and 2 Surveying. Some of the schools have received profitable instructions in the rudiments of Geometry. In most of them some attention has been given to the principles of correct reading; but generally, this most profitable branch of school education, has received less attention than its importance demands. By careful attention to due degree of slowness, distinctness of Articulation, Accent, Emphasis, and the tones, the reading in our schools may, and ought to be, greatly improved.

The town is divided into eleven school districts; in seven of them, Summer schools were kept, these were all visited by your committee, near their commencement, and we found in the whole, 249 scholars, which is about one third of the number in town. There were also in two or more districts where there were no town schools, private schools kept for short terms. The appearance of the schools when visited, was such as to excite the hope that they would be profitable and satisfactory. A number of them having closed before the time expected by your commttee, only four of them were visited a second time.

In ten districts there have been winter schools, and in most of them experienced and well qualified Instructors were employed. Nearly all of the schools continued to the extent of their funds, and some were lengthened by the efforts of individuals. Each of them was visited near its beginning and close by your committe. At first visit 460 scholars were present; and at the last 466. From the minutes we have taken, it appears that something more than one third of our scholars have attended the summer schools, and about two thirds, the Winter schools.

Having given a general view of the condition of our schools, we proceed to speak of them particularly, in the order of the number of the districts.

District No. 1. Miss Hannah W. Foster had charge of the summer school in this district. At the first visit 34 scholars were present, and 42 at the last. The scholars had been well instructed in the elementary branches. The sounds of the letters, pauses and abbreviations, were well understood by very small children. Several small classes recited the multiplication table very readily.—Several classes in Grammar, appeared to good advantage. Arithmetic and the principles of Geography were taught understandingly. The neatness and good order of the house and scholars, was honorable to parents, teacher and children. Had the reading and spelling, received equal attention to the other branches, this school would have appeared atmost without exception. The scholars were allowed to read, in a manner quite to precipitate, and the tones and pauses, though well taught in theory, had not been so accurately put in practice.

Mr. John A. Longfellow was employed in the winter school. There are 73 scholars in this district, 55 of whom were present at each visit, or about 3-4 the whole number. 28 studied English Grammar, 33 Geography, 3 Phylosophy, 4 History, 3 Algebra, 14 mental Arithmetic and 15 Arithmetic by rules. Under the care of Mr. Longfellow the exercises of the school were generally well conducted. The order appeared to be good, the scholars were supplied with sufficient business, and seemed to have pursued it with a good degree of that industry, which is so necessary to success in any department of life. In this school we noticed a neatness about the writing books, which is not to be seen in many other schools in town. In the whole number of writing books (40) presented for examination, containing all writing done by the

scholars, whose names were upon them, during the whole term, not a blot nor an unnecessary scroll was seen, neither were any of them soiled and injured by careless handling. The improvement in writing was such as might be expected of scholars who are careful to keep their books and other concerns in good order, who "have a place for every thing, and every thing in its place," not a place for *every* thing, and *every* thing in it. One thing however it may be well to mention; the books cannot be kept so clean, in many of the school houses in town as in this, for the reason, that the houses are not kept so clean. It has been the practice in this district for more than twenty years, at the close of each term of school, to give the house a thorough cleansing. There is a class of scholars in this school, who parse the Eng. Grammar with an understanding that would do honor to any of our schools. The spelling is very good, the reading is deficient of that deliberation and distinctness, which are an indication of a proper understanding of a subject. In some cases, the pronunciation is so precipitate as to render distinct articulation impossible. The answers to question on the primary lessons, grammar, geography and arithmetic, were given promptly and in a manner showing that they had been well attended to.

District No. 2. Miss Eliza Williams, instructed in this district in the summer. 31 scholars were present, when the school was examined near the commencement of it. The school was in very good condition, and gave promise of being profitable.—They had made a very good beginning, by commencing with the foundation of the several studies. More energy and dispatch would have increased the favorable indications. The school was not visited a second time, in consequence of the committee not being notified of the time of closing.

Mr. Sam'l A. Jewett, had the care of the winter school eight weeks. Number of scholars in the district 89, when first visited 57 were present, and 55 the last visit. 28 wrote, 17 were studying mental Arithmetic, 26 were studying rules of Arithmetic, 5 Algebra, 4 Philosophy, 31 Grammar, 45 Geography.

The reading in this school is respectable, and compares well with that of other schools; but the other exercises moved slowly, and that ambition which was apparent in most other places, was wanting here. Mr. Jewett possessed the requisite qualifications of a teacher so far as literature is concerned, but appeared not to feel the importance of urging his pupils forward, by having his own feelings very deeply interested in his business. His manner of conducting the school, was not of that kind which could be very profitable to all classes.

It was deficient of that readiness and dispatch, which is necessary to keep awake in some scholars, an interest in their studies; but with the friendly aid of the parents, older scholars, and the suggestions we made, we had hopes that the school would generally be profited by his instructions. It was not, however, conducted to the satisfoction of the district, and we were called to visit it, before the time to close. The instruction appeared to be pretty correct; the greatest objection was, that much time was taken in doing a little, and this fault, we believe, must rest upon both scholars and teacher, and perhaps a share of it on the parents. We are of opinion that had the parents and older scholars, afforded him their aid, when it was found he needed more of it than some other men would, the school would have been much more profitable than it was. Some of the scholars made very commendable proficiency, while others advanced but little if any.

District No. 3. The summer school in this district was entrusted to Miss Emeline Packard. The school continued three months, was well attended and profitable, 35 scholars were present at the first examination, and 42 at the last. Number in the district 89. Very commendable progress was made in mental arithmetic, grammar and geography.—The elementary lessons received due attention, and good improvement was made in reading and spelling.

In the winter Mr. Nathan Foster instructed. 74 scholars were examined at the commencement, and 55 at the close of the school. 42 attended to geography, 19 to mental arithmetic, 28 to common arithmetic, 28 to English grammar, 10 to Philosophy and 40 to writing. The first exhibition gave encouragement of a very profitable school; and altho' the attention of the scholars had been diverted from their studies, and the school for a time irregularly attended, this expectation was fully realized. Each branch had received its proportionate attention, and the proficiency was satisfactory. Much attention had been given to reading, and it was greatly improved.

District No. 4. Miss Ann G. Snell, taught the upper and Miss Jerusha L. Snell, the lower school in this district in the summer.

The upper school was well regulated. The business of the school moved forward with energy and dispatch. The lessons received careful and thorough attention, and every thing indicated a profitable school.

In the lower school there were about 50 small children, 16 of whom read in the Primary Class Book, 7 were learning the Alphabet and the remainder in the stages between.

These schools closed, before the term had expired, in consequence of which they were visited but once.

The schools were committed to Mr. Tho. Kimball and Miss Uraniah Gibson, in the winter.

In Miss Gibson's room, were 49 scholars at the first visit, and 52 at the second. The children were playful and noisy, but had advanced from the Alphabet, to two or three letters, from two or three letters, to two and three syllables, and from this, to reading easy lessons decently. Equal improvement was made in spelling, 7 had been through Parley's Geography, and were reviewing, once through Parley's & once over the maps of Olney's, 22 had been three times through Emerson's Arithmetic, 3 had studied 54 pages in Colburn's.

This school being composed of small children requires teachers possessed of all the qualifications of the most experienced, wise, and judicious matrons. The government should not be too severe, lest it excite a dislike to the school, which would render it worse than useless. It should not be too lax lest it produce an insubordination, the effect of which would be no less injurious.

In Mr. Kimball's school the numbers present at the examinations were 52 and 73. The whole number in the district is 241. 75 had attended to writing, 70 to common Arithmetic, 21 to mental Arithmetic, 58 to English Grammar, 47 to Geography, 20 to History, 11 to Philosophy, 7 to Astronomy, 2 to Chemistry, 4 to Algebra, 2 to Surveying, 1 to Book Keeping.

The writing books were neat; many of them evinced good improvement, and some of them superiour taste. The elementary lessons received proper attention. The readiness with which the answers were given, was creditable to the capacities of the scholars, and the exertions and ability of the instructor. Mr. Kimball seemed to have put forth all his energy, and those under his care did themselves the honor to unite with him and profit by his labors. Very few teachers can accomplish so much in the same time, as was done in this school. Much credit is due Mr. Kimbal for interesting all his pupils in their studies, and keeping them well employed.

Though the *reading* was respectable, the fact that more was done in the higher branches than in any other school in town, will very reasonably account for there not being so much improvement in it, as in some other schools.

District No. 5. This school was kept in the summer, by Miss Evaline Johnson. At the examination soon after the school commenced in the East house 26 scholars were present. 3 studied Geography, 2 Smith's Arithmetic, 1 Colburn's, and 4 English Grammar. Some of the scholars read well, others clumsily. The scholars in grammar answered their questions readily, but not very correctly. The government in this school was rather too lax, and the scholars were assisted in answering questions which they should have been able to answer, without other aid than that afforded by their books.

These faults received the notice of the member of the committee who visited the school, and if they were corrected the school may have been a profitable one. This school was not visited a second time.

Mr. Daniel A. Fairbanks presided in the winter. Whole number of scholars 81, present at the first visit 31, at the last 47. 25 studied Grammar, 12 mental Arithmetic, 6 Philosophy, 3 Chemistry, 23 Geography 1 Book Keeping, 1 Algebra and 44 attended to writing.

The scholars were well instructed in the primary lessons, defined and analyzed the words in their spelling lessons. Very creditable proficiency was made in all the studies pursued in the school. A class of 7 scholars from 9 to 13 years of age went through the First book of History, First Lessons of Holbrook's Geometry, and made good progress in Arithmetic. At the same time 6 of them studied Geography and 3 Grammar, in all of which they appeared well.

District No. 6. This district contains 35 scholars. They had no summer school. They were under the care of Miss Susan H. Chandler in the winter. Present at the examinations, 19 and 18.—There were 9 in mental Arithmetic, 8 in Geography, and 5 in Grammar. The elementary lessons received due attention and the reading was improved. 16 writing books exhibited fair improvement. The scholars were attentive and the school appeared well governed.

District No. 7. Miss Uraniah Gibson kept the summer school. Number of scholars in this district 55. 29 and 27 were the numbers examined. In Geography were 10, in Arithmetic 13, in Grammar 9. The writing looked decently. The elementary lessons were studied. The reading was improved, and the school appeared to be pleasantly governed.

During the winter term, Mr. Samuel Stevens was instructor. Numbers examined 44 and 39. 14 studied common Arithmetic, some of whom made good proficiency; one but 11 years old went nearly through Smith's Arithmetic, 9 studied Geography and 11 Grammar, 10 attended to mental Arithmetic, and 18 to writing. The examination evinced that it was the intention, that what was parsed over should be understood. The elementary lessons were attended to, commendable improvement was made in reading, and the school appeared studious and in good condition. Mr. Stevens took charge of this school under rather unfavorale circumstances. He was a young man, had had but little experience in teaching and none recently. He was unacquainted with the manner of teaching in this town, and we had some fears of his success; but by the united efforts of teacher, parents and scholars, the schoo.

was profitable.

District No. 8, contains 17 scholars. No summer school. It was committed to the care of Miss Clarisa Richards in the winter. 18 were present when it was first visited, and 15 when visited the last time. 7 in Arithmetic answered questions with understanding and promptness. A class in Geography had made good progress. A class of 8 in English Grammar parsed understandingly and fluently, 2 in Phylosophy recited 200 pages. The reading had received much attention and a correspondent improvement was made. The smallscholars were taught many useful things, by oral instruction. The scholars were required to relate the substance of what they read.

District No. 9. Miss Sarah Nelson taught the summer school. In this district are 55 scholars.—27 and 26 were the numbers examined. There were 11 in mental Arithmetic, 9 in Geography, 4 in Grammar. 7 writing books were exhibited; in some of them was good improvement. The school was pleasantly governed and efforts and ability to assist the scholars, were not wanting; but it appeared that in some instances, the desire to advance, had prevented a sufficiently thorough acquaintance with what was passed over.

The winter school was put under the care of Mr. Thurston W. Stevens. 38 and 39 scholars were present at the examinations. The first lessons, reading, spelling and writing, received profitable attention. 7 attended to Geography, 10 to common Arithmetic, 15 to mental Arithmetic and 10 to Grammar.

In all the studies, this school received profitable instruction, and it was duly attended to. The exercises moved forward pleasantly and in good order.

District No. 10 has in it 25 scholars. We neard nothing of a summer school. Mr Zelotes A. Marrow had the oversight of the winter school. 11 were examined at the first visit and 16 at the last.

A class in grammar parsed in a manner showing a familiar knowledge of the grammar and an understanding of the subject. The same were examined to page 189 in Olney's Geography and gave evidence that it had been attentively studied. A class in Mental Arithmetic which had been through Colburn's Arithmetic answered the questions with uncommon readiness and understanding. The scholars in common Arithmetic appeared respectably. Reading, spelling and the elementary lessons received their share of attention, 11 neat writing books were exhibited.

District No. 11 has not been heard from.

From an examination of the schools and schoolteachers, we are led to make some remarks in concluding this report. The town has this year, as it has for many past years, supplied itself with the greatest share of its instructors; sixteen of the nineteen person employed, having been natives and received their education in this town. A number of them of both sexes are entitled to the first rank as teachers.

But we have found it the case with some, particularly with the females, that they have pursued the higher studies, to the neglect of the rudiments of those branches with which they should be familiarly acquainted to be well qualified to take charge of common town schools. Amongst others we have particularly noticed a deficiency in the knowledge and manner of teaching mental arithmetic. In some instances much of the interest and profit of this study, is lost by the neglect of the most important part of it, *the process of reasoning*. This is one of the most profitable studies pursued in our schools. No other study affords so complete a discipline of the mind, and enables it so readily to fix upon its object, to retain the ideas and carry them out without confusion. School-teachers, for the improvement of their own minds, as well as for the benefit of those under their care should have a thorough understanding of it. It is an introductory study in most of the high schools in the country.—Our school law does not require a knowledge of it in the qualifications of instructors; but the good of our schools and public opinion do require it. *We* consider it almost as indispensable as any other branch of knowledge. As the laws now are, no committee can refuse to grant credentials for failure in this important point. Our agents should look to this in selecting persons to take charge of their schools, till the necessary amendment be made in the law. That this amendment be made, the question must be agitated by some one in our legislature, and it may be well that *our* next representative be charged with the mission. This defect as we deem it, in the school law with other subjects which we propose to lay before you, we are aware are beyond the legal control of the town; and we present them that by the acceptance or non-acceptance of this report, we may have an expression of your views upon them.

This is an age noted for experiments. Your committee have this year taken the number, names and ages of the scholars, in each district they have visited, and a minute of the studies they are severally pursuing. Our object in doing it, was to ascertain the comparative state of forwardness of the scholars of the same age, in the different schools, and what proportion of them attend the schools; supposing that such a course would have an effect to stimulate teachers and scholars. By this we not only find the comparative standing of the schools, but of each individual in each school. To assist our successors in office (by the way we do not nominate them) in carrying out the experiment, and carrying it little farther than we first intended, we propose that the selectmen require of the school agents to return with the number of scholars, the name & age of each; that it may be known not only how many absent themselves from school, but who they are. We propose also, that the committee furnish each instructer with a blank, to be filled by him, giving the names and ages of his scholars, and the studies to which each is attending. To this the committee can add at the examination at the close of the school, the progress made by each scholar and the report of the state of the schools will be completed.

Another subject to which we call your attention, is that of school books. It is to be hoped that by bringing up this subject at this time, that parents will wait the action of the committee, before they purchase books, and that the committee will avail themselves of an early opportunity to decide what books should be procured, when new ones are to be purchased, and give notice of their decision, that there may be uniformity in the several schools and particularly in the same school. From some cause or perhaps from various causes—partiality of teachers—want of understanding on the part of parents as to the most approved books—whims of children, and it may be, these are not all, some of our schools have sustained a great loss, by having a variety of books in the same study. For instance, there are two or three kinds of Grammars, as many of Arithmetics and as many more of Geography. This is a perplexity which very much retards the progress of the schools. Scholars of equal attainments cannot study in the same class, because their text books differ. In other instances an injudicious selection has been made, when but one is used. By this remark, we refer particularly to Green's Grammar & the Malte Brun Geography. Of Green's Grammar suffice it to say, a great loss has been sustained when it has been suffered to supplant Murray's Grammar simplified by Fisk, or Murray's Grammar without the simplification. Of the Malte Brun Geography, some will be surprised to hear any remarks which shall be other than commendatory.—But we venture the assertion, (all the great names attached to its recommendations, and the asserted fact, that it is introduced into most of the schools in the United States, to the contrary notwithstanding) that it is the worst selection for common schools, that can be made from the books now in use.

The most that can be done by our best scholars under the care of good teachers, is to advacce half way throngh the book in three months, without taking a much greater proportion of their time than should be taken for the study of geography, and then they *can have* but an *imperfect knowledge* of the part they have passed over; while with some other books, two months is sufficient time to go through and gain a more thorough knowledge of the whole, than they can of the one half of this, in three months.

The arrangement, the order in which the study is pursued, is good; the great objection is, it is encumbered with so much comparatively unimportant matter, that the principals are lost. This book however may be useful in such places as schools are kept for the whole year, and where masters find a difficulty in providing business for their scholars. If a scholar has ambition enough to think of ever getting through his book, it is completely calculated to keep him out of idleness; but for so short terms as our town schools are continued, we are of opinion that our children may be employed in better business than in studying it.

For our school to flourish and afford our children and youth, all the benefit they may be made capable of producing, they must have the united efforts of committees, teachers, agents, parents and scholars. As "every one thinks his neighbor farther gone than he," permit us to say that in our opinion none of these are more deficient in doing their duty than the parents. Their duty is not done when they have furnished their children with the necessary books, and sent them to school, thinking the master will learn them all they ought to know, in a few weeks. This is little more than saying to the naked, be ye clothed, or to the hungry, be ye filled. There is something more for *them* to do or it may be, that the teacher will fail to do all they expect of him. The children need more encouragement, they need looking to, that their winter evenings be not lost. Unless some interest is taken to know how they are advancing by examining them, and talking with them, they soon doubt your having any solicitude for their progress and will waste their time at school. Teachers need the aid of parents to asist and encourage them. They should occasionally see a pleasant face within their doors, to give them an assurance that they are not left "to contend alone themselves against a host," and to cheer them by a participation in their cares, and to aid them in their labors, by such expressions of interest in them.—The importance of schools is admitted by every parent, but they appear disposed to let the responsibility rest almost entirely on the instructors. A large share of it belongs to you, and would you feel it more sensibly, the effect would be salutary on the rising generation. Let it be remembered by parents, that it is at school their children are acquiring habits and receiving an education which are to influence their whole lives, and they cannot feel indifferent on the subject. These children are to give the religious, the moral and the political character to the State. It is by the children now receiving the direction of their minds in our schools, that the concerns of this mighty republic are to be directed.

The individual, as well as the national character of the Union, is depending more upon the character of our common schools, than upon any other institution—more than upon all the other institutions in our country. With this view of the subject, every philanthropist, every patriot, every lover of religion and morality, will unite to advance the interests of our common schools.

NATHAN FOSTER,
JOHN KEZER, JR.
PLINY HARRIS.

Summary.

In the present state of political parties, the very nature of the business of a political editor, licences him in the commission of acts, which would not be tolerated in others. Therefore when we saw articles from one paper, transferred to the columns of the Bangor Courier, Kennebunk Gazette and some half a dozen other political papers, without any credit for their origin, we held our peace. But when the Mechanic & Farmer, and Yankee Farmer, take the same liberty, we think it time to speak out. "A word to the wise, &c."

MAKING A BULL OF A PAIR OF OXEN. The editor of the Kennebec Journal, in his last week's paper made Mr. Underwood's large oxen weigh nearly 43,000 pounds, or about ten tons apiece. Whatever may be said of the oxen, this is certainly one of the largest *bulls* on record

N. B. The above oxen took passage in the Steam boat week before last, from Hallowell for the Boston market, where they have doubtless rejoiced the hearts and cheered the stomachs of the portly aldermen of that goodly city, before this time. To improve upon Dr. Johnson's facetious epigram "Who *eats* fat oxen must himself be fat." Q.

CURE FOR THE BITE OF A SNAKE. A writer in the Franklin Farmer, relates a case of a man who was bitten by a copperhead snake, and was cured by making a strong decoction of the bark from the root of the yellow poplar tree (more properly called the American Tulip tree) of which he drank half a pint every half hour, and washed the part swollen in it, and applied the bark bruised and boiled as a poultice. He says it immediately relieved the pain and reduced the swelling, and affected a cure in a short time. S.

It is estimated that there are 50,000 persons employed in the woolen Manufactories in the United States, and the value of the article they manufacture are 50,000,000 of dollars per annum.

The annual value of the woolen Manufactories of England is $100,000,000 annually.

The whole Manufactured products of France are estimated at 300,000,000, one sixth part of which are woolens.

It is said that a tea made of sunflower seeds and sweetened with honey is equally as good in catarrhal affections, as that made of flax seed.

Pulverized charcoal and sweet oil are said to be an antidote to arsenic. A table spoonfull should be taken at a time, and repeated as often as the patient vomits.

Nothing feeds disease more sumptuously than often disturbed passions.

"Idleness is the parent of many vices." If you would avoid doing evil keep constantly engaged in some useful employment.

NEW METHOD OF FATTING CALVES. M. Labbe, finding that the carrot is one of the most nutritious kinds of food for cows, greatly increasing the quantity of milk and furnishing a richer cream, reduced half a pound of carrots to a pulp, boiled it 4 or 5 minutes in half a pint of water, and added the whole, in two portions to the noon and evening mess of a calf, 5 days old. The same food, as a substitute for milk, was increased daily, so that on the eleventh day the boiled carrots were given as the entire food, except that after the eight day, a boiled potatoe was added to each of the 3 daily messes. The calf not only thrived finely but grew so fat that, on the 20th day, not intending it for the butcher, they were obliged to moderate the food.—*Franklin Journal.*

INCOMBUSTIBLE CLOTHING. A London Journal says that a solution of Phosphoric acid has the power of rendering linen, muslin &c. incombustible. This has been fully demonstrated at the Royal institution, on a late occasion to the satisfaction of a numerous audience. It is of importance that this fact should be generally known. Phosphoric acid may be obtained by burning a piece of phosphorus in a bottle in which it will be collected in the form of a white powder, which is readily soluble in water.—*National Gazette.*

WHEAT raised in Washington County, for which a Bounty has been paid by the State.

	Bushels.	Bounty.	1837, Census.
Alexander,	402	$33,75	457
Amity,	668	51,28	130
Addison,			901
Baileyville,	76	6,96	331
Beddington,	51	4,69	169
Baring,			286
Calais,			3027
Cherryfield,	72	6,75	1000
Charlotte,	813	67,18	612
Columbia,	327	28,42	793
Cooper,	582	47,72	571
Crawford,	361	28,89	311
Cutler,			667
Dennysville,	165	13,10	349
Eastport,	25	2,30	2344
Edmunds,	189	16,17	205
East Machias,			1282
Harrington,	397	34,21	1354
Hodgdon,	3183	224,61	552
Houlton,	5868	412,51	667
Jonesborough,	118	11,28	435
Jonesport	33	2,78	581
Linneus,	2514	172,45	208
Lubec,	204	17,07	2081
Machias,			1239
Machias Port,			821
Marion,			245
New Limeric.	1780	128,40	124
No. 23			
Plantation,	108	9,71	
Pembroke,	1215	99,87	124
Perry,	820	64,40	866
Princeton,			929
Robbinston,	506	41,56	207
Steuben,	25	2'30	702
Trescott,	311	26,69	802
Wesley,	288	23,68	713
Whiting,	96	8,16	232
Weston,	4705	332,74	462
Monticello Pl.	1105	79,13	213
Unincorporated Places,			134
	27,014	$1,998,76	1369
			28,495

The inhabitants of the town of Weston in this County, raised twenty-two bushels and two quarts to each individual. This is coming close alongside of Springfield, in Penobscot County. The inhabitants of both these towns deserve credit for their industry and economy in wheat raising. They have done much towards supplying others with the staff of life. The town of New Limerick, in this County, raised 14 bushels and 12 quarts to each inhabitant. Linneus, 12 bushels 2 quarts. Houlton, 8 3-4 bushels. Hodgdon, 5 3-4, and Amity, 5 1-8 bushels. The whole County, however, will not average so high as some others. S.

The disastrous results of the great fire at Charleston has excited a very just sympathy throughout the country. Philadelphia, Baltimore, Augusta, Columbia' and Savannah, have made creditable contributions to the relief of the sufferers. Savannah has voted $8,000, Augusta $6,000 and Columbia $9,500.—*Standard.*

The sick are all taking Goelick's Matchless Sanative, which is astonishing the world with its mighty victories over fearful diseases.

MARRIED,

In Winthrop, on Sunday evening, 22d ult. by Oakes Howard, Esq. Mr. Henry Day to Miss Hester Ann Cobb.

In Portland, by Rev. Mr. Dwight, Mr. THOMAS W. NEWMAN, of Brunswick, to Miss SARAH DYER, of Portland.

In Augusta on Sunday last, at the Methodist Chapel, by the Rev. Mr. Fuller, Mr. William H. Wheeler to Miss Sarah W. Winslow, both of Augusta.

In Worcester, on the 21th ult. by Rev. Mr. Peabody, Mr. Joseph Lyon of Holden, to Miss Mary S. Lamb of W. "And the lion shall lie down with the lamb."

DIED,

In Windsor, May 2, Mrs. Betsey Leballister, 25.

In Wiscasset, at the residence of his son, Capt. Cornelious Turner, aged 96.

In Bethel, Jas. Sprauge, a soldier of the Revolution aged 92.

In Troy, N. Y. 17th ult. Capt. John Reilay, aged 104, a soldier of the Revolution.

BRIGHTON MARKET.—MONDAY May 7.,
From the Boston Patriot.

At Market 215 Beef Cattle, 11 pairs Working Oxen, 14 Cows and Calves, 80 Sheep and 220 Swine.

Prices—Beef Cattle—Last week's prices for some qualities were hardly supported; we quote the same; 1st quality at 8,25 a 8,50; second quality 7,50 a $8; third quality 625 a 675.

Working Oxen—Sales were mdae at $90 a 95.

Cows and Calves—We noticed sales at $30, 32, a 37.

Swine—Several lots were sold, but we did not learn the price. At retail 9 and 10; small Shoats 10 and 11

At a Court of Probate, held at Augusta, on the last Monday of April, A. D. 1838, within and for the County of Kennebec.

A certain instrument purporting to be the last will and testament of JOHN RICH, late of Hallowell, in said County, formerly of Boston Massachusetts, deceased, having been presented by ABRAHAM RICH, the Executor therein named for Probate:

Ordered, That the said Abraham Rich give notice to all persons interested, by causing a copy of this order to be published in the Maine Farmer and Chronicle, newspapers printed at Hallowell, in said County, three weeks successively, that they may appear at a Probate Court to be held at Augusta in said County on the last Monday of May next at ten o'clock, in the forenoon, and shew cause, if any they have, why the said instrument should not be proved, approved, and allowed as the last will and testament of the said deceased. 38

H. W. FULLER, Judge.

ATTEST: JOSEPH J. EVELETH, Register.
A true copy. Attest: Jos. J. Eveleth, Register.

Fresh Garden Seeds

At Lincoln's Agricultural Seed Store.

THE Subscriber takes pleasure in announcing to the public generally, and to his friends and customers in particular, that he has greatly enlarged his stock of *Agricultural, Garden, and Flower Seeds*, which has been selected with much care from the most experienced Growers of seeds in the States of Maine, Massachusetts, Connecticut and New York; that many rare and valuable new varieties have been added, which makes his asortment more extensive than can be found in any other seed store in the State, and that he is frequently corresponding with Messrs. Hovey, Boston, Mr. Belden, Connecticut, and Messrs. Princes of Flushing near New York, which enables him to procure at short notice any variety or quantity of seeds which he may not have. They are put up as usual in papers with short printed directions, for their culture and use, masked 6 1-4 cents, and 12 1-2 cents, and packed in boxes containing from $5 to $10 worth. 33 1-3 per cent. discount from the marks will be made to those who wish to buy to sell again with the privilege of returning the unsold seeds; and 40 per cent. discount will be made to all those who will pay for the whole amount of seeds received on or before the first day of Sept. next.

All orders by mail or otherwise, promptly attended to.

R. G. LINCOLN.

Hallowell, March 30, 1838. 33c

POETRY.

Mr. Holmes. The following beautiful Ode is rom the *Harbinger of Peace*, published in 1830.—As I have not seen it in any other periodical, I send t to you hoping that you will give it a place in the *Maine Farmer*.

Vassalborough, April 23d, 1838. E. F.

ODE.

The hero hath his fame,
'Tis blazoned o'er his tomb,
But *Earth* withholds her glad acclaime,
And frowns in silent gloom:
His footsteps o'er her breast
Were like the Simoon's blast,
And Death's dark ravages attest
Where'er the Conqueror passed.

By him her harvest sank,
Her famish'd flocks were slain,
And in the fount where thousands drank
He mingled blood like rain;
For him no requiem—sighs
From vale or grove shall swell,
But flowers exulting, lift their eyes
Whence the proud Spoiler fell.

Look at yon peaceful bands
Who guide the glittering share,
The quiet labour of whose hands,
Doth make Earth's garments fair.
For them the rich perfume
Of ripened fields doth flow,
They bid the desert rose to bloom,
The wild with plenty glow.

Ah! happier thus to prize
The humble rural shade,
And like our Father in the skies
Blest Nature's work to aid,
Than famine and despair
Among mankind to shed,
And Earth, our mother's curse to bear
Down to the silent dead.

THE PLOUGH-SHARE OF OLD ENGLAND.

BY ELIZA COOK.

The sailor boasts his stately ship, the bulwark of our isle,
The soldier loves his sword, and sings of tented plains the while;
But we will hang our plough-share up, within our fathers' halls,
And guard it as the deity of plenteous festivals.

We'll pluck the brilliant poppies, and the far-fam'd barley-corn,
To wreath with bursting wheat-ears that outshine the saffron morn;
We'll crown it with a glowing heart, and pledge our fertile land,
The plough-share of Old England, and the sturdy peasant band!

The work it does is good and blest, and may be proudly told!
We see it in the teeming barns, and fields of waving gold;
Its metal is unsullied, no blood-stain lingers there,
God speed it well, and let it thrive, unshackled everywhere!

The bark may rest upon the wave, the spear may gather dust,
But never may the plow that cuts the furrow lie and rust.
Fill up, fill up! with glowing heart, and pledge our fertile land,
The plough-share of Old England, and the sturdy peasant band!

Great Price of Sheep.—At the annual fair of the sheep farms of Rambouillet, in June.

Fifty rams were put up; and such was the eagerness of the farmers to improve their flocks, that four of the finest produced upwards of 1,800 francs each; but one most remarkable for its beauty and symmetry was sold to M. Symphal a farmer at Lyonvil, in the Aisnet, at the enormous price of 2,687 fr. 50c.; another to M. Bouvry, at Poilcourt, in the Ardennes, for 2,150fr.; and a third, to M. Auberge, at Cramayal, in the Sieneet-Marne, for 2,000fr. The lowest price was 274., and the average produce of the whole fifty rams was 594fr. each. Thirteen ewes were sold singly at prices averaging 75fr. 25c. each, and 58 others were knocked down in one lot for 3,117fr. 50c.

If they do not have large sheep at Rambouiliet, we know not where they could look for them.

BUSH MESSENGER.

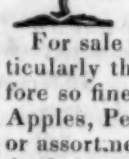
The subscriber would respectfully inform the Farmers of Kennebec County that the unrivalled Horse BUSH MESSENGER will stand for the use of Mares during the ensuing season at Winthrop Village.

The *Bush Messenger* is a son of the Old Winthrop Messenger, whose fame is so well known in this County that nothing further need be said of him. His son combines all the good properties of his sire, and has none of his failings. He is a cream color, stands sixteen and a half hands high, is young, healthy and active. Those who are anxious to raise colts that shall be well fitted for speed, strength and bottom, with symmetry of form and excellence of disposition, had better embrace this opportunity.

☞ Terms reasonable.

WILLIAM H. GAZLIN.

Winthrop, April 19, 1838. 3w12



FRUIT TREES, ORNAMENTAL TREES, MORUS MULTICAULIS,

For sale by the Subscriber. The varieties, particularly the Pears and the Plums, were never before so fine,—the assortment so complete.—Also of Apples, Peaches, Cherries, Grape Vines—a superior assortment of finest kinds; and of all other hardy fruits.

20,000 Morus Multicaulis or Chinese Mulberry Trees can still be furnished at the customary prices, if applied for early. This being all that now remain unsold.

Ornamental Trees and Shrubs, Roses, and Herbaceous plants, of the most beautiful, hardy kinds—Splendid Paeonies, and Double Dahlias.

4,000 Cockspur Thorns; 10,000 Buckthorns—for Hedges.

800 Lancashire Gooseberries, of various colors and fine kinds.

Harrison's Double Yellow Rose, new and hardy; color fine—it never fails to bloom profusely.

Trees packed in the most perfect manner for all distant places, and shipped or sent from Boston to wherever ordered.

Transportation to the City is without charge.

Address by Mail, Post paid.—Catalogues will be sent gratis to all who apply.

51—t.june. WILLIAM KENRICK.

Nursery, Nonantum Hill, Newton, Jan. 25, 1838.

GRAVE STONES

The subscriber would inform the public that he continues to carry on the Stone Cutting business at the old stand, (near the foot of Winthrop st.—on the River side of Main St.) where he keeps a very large assortment of stone—consisting of the beautiful New York White and Blue Marble—Thomaston Marble—Quincy Slate stone, &c. &c.

He would only say to those individuals who wish to purchase Grave Stones, Monuments, Tomb Tables, Paint stones, &c., that if they will call and examine the chance of selecting among about 1000 feet of stone—some almost, if not quite equal to the Italian White Marble—also his (PRICES) Workmanship, after more than a dozen years' experience—if he cannot give as good satisfaction as at any other place in Maine or Massachusetts, he will pledge himself to satisfy those who call for their trouble. His shop will readily be found by its open front, finished monuments, &c. in sight. To companies who unite to purchase any of the above, a liberal discount will be made. Chimney Pieces, Hearth stones, &c. furnished to order.—All orders promptly attended to; and all kinds of sculpture in stone done at short notice.

JOEL CLARK, Jr.

Hallowell, Dec. 2, 1837. 43

FOR SALE IN GARDINER,

On the road from Hallowell to Litchfield, and 4 1-2 miles from the former, a good farm, which has been well cultivated, and has 150 rods of stone wall on it. It contains about 93 acres—and is now occupied by Mr. Carlton.—For terms of sale apply to Joseph Carlton and Joseph Carlton, Jr. on the premises, or to the subscriber at Hallowell.

CHS. VAUGHAN.

April 6, 1838. tf -10

SHINGLE MILLS.

The subscriber offers to the public, *Shingle Machines*, patented by Mr. Cary of Brookfield, Mass., which he can safely say, are superior to any others built in the New-England States; and will furnish them to purchasers on short notice, jointing wheels and saws with them. All such as wish to purchase will do well to call and examine.

CHARLES HALE.

Gardiner, Me., March 1, 1838. 12tf

GARDEN & AGRICULTURAL SEEDS.

HOVEY & Co., Seedsmen,

No. 9, Merchants' Row.....Boston,

HAVE now on hand and for sale at their Seed Store a large and extensive assortment of GARDEN, FIELD, GRASS & FLOWER SEEDS of the growth of 1837,—at wholesale or retail, warranted of the best quality.

Grass and Field Seeds of every description, viz: Herds Grass, Red Top, Northern and Southern Clover, White Clover, Lucerne, Orchard, Rye and Dew Grass, Millet, &c. &c. Spring and Winter Wheat, Barley, Rye, Buckwheat, Indian Wheat, Mangold Wurtzel, Ruta Baga, Sugar Beet, Honey Locust, White Mulberry, Early and Late Potatoes for seed, Early Dutton, Phinney and other fine and celebrated varieties of Seed Corn, &c. &c.

Vegetable Seeds comprising one of the best assortments to be found in New-England. It would be impossible to enumerate the varieties in an advertisement. Every new and superior kind is annually added to our stock.

Flower Seeds. An assortment exceeding four hundred varieties, embracing all the newest and most rare and choice kinds in cultivation; reared principally by ourselves at our garden near Boston, and warranted *true* to their *names*. Among the number are assortments of *double* German Asters, Lennices, Balsams, &c. &c.

Fruit and Ornamental Trees: Grape Vines, Gooseberries, Currants, &c. Asparagus and Rhubarb roots of the best kinds. A superb collection of Double Dahlias. Greenhouse plants, Hardy flowering Shrubs, Bulbous flower roots, &c. Books on Agriculture, Horticulture and Botany. Garden Tools and every thing supplied for the Garden.

☞ Dealers and others furnished on accommodating terms with Garden Seeds by the pound, bushel or ounce; also in Boxes, containing every variety wanted, put up in papers ready for retailing; each kind labelled with the name and particulars of cultivation. *A liberal discount made from retail prices.*

*** Having for a long period been engaged in raising seeds and cultivating plants of all kinds, we feel assured that we can supply our customers with articles of *genuine* quality and *true* to the kinds ordered. In the selection of Wheat, Corn and other agricultural seeds, we give the greatest attention.

Orders directed to Hovey & Co., 9, *Merchant's Row....Boston, will meet with immediate attention, and be faithfully executed.* *HOVEY & Co.*

BEES—BEE HOUSES.

Beard's Patent Bee Houses, with Bees in them or without Bees. Price, with Bees in them and the Right for one farm, from twenty-five to fifty dollars apiece. The above Bee Houses contain from two to four swarms each, in two separate apartments—each apartment contains two hives and thirty-six boxes; the whole house contains seventy-two boxes and four hives—and is so constructed that you have no occasion to kill any Bees for time.

Price of empty Bee Houses, with a farm Right, fifteen dollars; Right without a house, for a farm, five dollars; Right for a good town for keeping Bees, forty dollars; those not so good, in proportion. Letters, post paid, will receive immediate attention.

EBENEZER BEARD.

New Sharon, March, 1838. 6m5.

The Maine Farmer

IS ISSUED EVERY TUESDAY MORNING,

In a quarto form, making at the end of the year a volume of over 400 pages, to which will be given a Title Page and Index.

Terms.—Price $2 per annum, if paid within the year—$2,50 will be charged if payment is delayed beyond the year.

☞ In any town where we have not less than *six* subscribers, we will appoint an Agent who will receive the pay for a year's subscription in grain or any kind of produce that is not liable to be injured by frost, and is convenient of transportation to market, at such price as it is worth in said town.

Any person who will obtain six *responsible* subscribers, and act as Agent, shall receive a copy for his services, so long as they continue their subscription.

Any paper will be discontinued at the request of a subscriber when all arrearages are paid, and if payment be made to an agent, for two numbers more than have been received.

All letters to insure attention must come *free of postage*, directed "to the publisher of the Maine Farmer, Hallowell."